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ABSTRACT

This journal issue focuses on the role of the community college in training K-12 teachers. The chapters included in this volume are as follows: (1) "Community College Roles in Teacher Education: Current Approaches and Future Possibilities," by Townsend and Ignash; (2) "Transfer Issues in Preservice Undergraduate Teacher Education Programs," by Lindstrom and Rasch; (3) "Taking the Golden State path to Teacher Education: California Partnerships Among Two-Year Colleges and University Centers," by Hagedorn, Newman, and Duffy; (4) "A New Degree for the Community College: The Associate of Arts in Teaching," by McDonough; (5) "High Schools, Community Colleges, and Universities: Partners in Teacher Education and National Efforts," by Gaskin, Helfgot, Parsons, and Solley; (6) "The Role of Community Colleges in Offering Baccalaureates in Teacher Education: An Emerging Possibility," by Furlong; (7) "Alternative Teacher Certification Programs and Texas Community Colleges," by May, Katsinas, and Moore; (8) "Accrediting Standards Affecting Mid-Level Teacher Education Preparation in the Community College," by Imig and Harrill-McClellan; (9) "The Role of State Postsecondary Education Policy in Supporting Teacher Education at the Community College," by Coulter and Crowe; and (10) "Sources and Information: Teacher Education at Community Colleges," by Gerdeman. (NB)

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NEW DIRECTIONS FOR COMMUNITY COLLEGES

ED 475 802

The Role of the Community College in Teacher Education

Barbara K. Townsend
Jan M. Ignash

EDITORS

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NEW DIRECTIONS FOR COMMUNITY COLLEGES

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The Role of the Community College in Teacher Education

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Barbara K. Townsend, Jan M. Ignash (eds.)
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Arthur M. Cohen, Editor-in-Chief
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EDITORS' NOTES

At the beginning of the twenty-first century, American K–12 education faces a predicted shortage of between 2 and 2.5 million teachers (Darling-Hammond, 2000). Fears about this shortage are sending waves of alarm through the K–12 system and the general public, with consequent cries to higher education to help by preparing more teachers. As higher education institutions, community colleges are responding to these cries, in both traditional and nontraditional ways.

Although a community college role in teacher education is not new, there is a new—or, more accurately, renewed—interest in this role. Prior to World War II, teacher education was a primary mission of many junior colleges (Hutcheson, 2002). Today, educators and policymakers around the country are once again looking at the role that community colleges can and might play in addressing the national shortage of teachers. These efforts range from the traditional provision of 2+2 articulated teacher preparation to the more controversial offerings of alternative teacher certification programs, four-year baccalaureate degree programs in teacher education, and in-service preparation for practicing teachers. At the 2002 annual convention of the American Association of Community Colleges, no fewer than fifteen sessions on community colleges and teacher education were presented, with titles such as "The Missing Link: The Community College Role in Pre-Service and In-Service Teacher Preparation" and "Teacher Education: A Leadership Role for Community Colleges." A national conversation about the ways in which community colleges can help to alleviate the teacher shortage has truly begun, with many believing that an expanded community college role is critical to meeting the nation's need for well-prepared teachers. This volume will contribute to the conversation by delineating the various roles community colleges play and can play in teacher education.

Chapter One, by Barbara Townsend and Jan Ignash, presents an overview of the roles that community colleges currently play in preservice and in-service teacher education. The authors discuss both traditional and nontraditional roles and the degrees of controversy associated with them, concluding with predictions and recommendations for the community college role in teacher education.

After this introductory overview, subsequent chapters illustrate the continuum of community college involvement in teacher education. In Chapter Two, Joyce Lindstrom and Kathe Rasch present the starting point in this continuum by examining the freshman and sophomore education and general education courses offered by community colleges that could be

accepted for transfer to four-year institutions. Drawing on their experience in Missouri teacher education, the authors discuss the various transfer issues surrounding these courses.

Chapter Three, by Linda Serra Hagedorn, Fran Newman, and Janet Duffy, presents the next level of involvement by describing six California community college and university partnerships in teacher education, including three that are funded by the state as part of its Community College Teacher and Reading Development Partnership Program.

In Chapter Four, Maureen McDonough illustrates the next step on the continuum of community college teacher education by describing the development of Maryland's associate of arts in teaching degree at the elementary level. In so doing she highlights the importance of a state-level effort as well as the need for the genuine involvement of faculty and administrators from both two- and four-year colleges across the state.

Chapter Five, by Fred Gaskin, Steven Helfgot, Sue Parsons, and Anna Solley, draws the previously discussed stages together by describing Arizona's efforts in teacher education. Arizona's initiatives have been stimulated through the development of the Teacher Education Partnership Commission, whose origin, role, and accomplishments are described. Examples of teacher education efforts in the Maricopa Community College District include the provision of undergraduate teacher education and general education courses, partnerships between the community colleges and four-year institutions, efforts to develop an associate degree in teaching, provision of in-service teacher education, and the offering of a postbaccalaureate degree. The chapter also provides an overview of the National Association of Community College Teacher Education Programs.

In addition to providing the first two years of an undergraduate degree in teacher education, some community colleges have begun offering a baccalaureate in teacher education. In Chapter Six, Thomas Furlong describes the development of this degree at St. Petersburg College, formerly St. Petersburg Junior College, in Florida, noting implementation issues regarding curriculum and delivery methods, facilities and location, student services and financial aid, program funding, marketing, and accreditation.

Some community colleges have developed an alternative certification program that enables those who already hold a bachelor's degree to become certified classroom teachers. In Chapter Seven, Paul May, Stephen Katsinas, and Lin Moore describe efforts in Texas to develop these programs, and provide an illustration by examining the alternative certification program in the Collin County Community College District.

One issue that four-year college faculty raise when considering the greater involvement of community colleges in undergraduate teacher education is the possible impact on the accreditation of four-year institutions' teacher education programs. To explore this issue, in Chapter Eight, David Imig and Mary Harrill-McClellan review the accrediting standards of the National Council for the Accreditation of Teacher Education (NCATE) and

of the Teacher Education Accreditation Council, and discuss the feasibility of accrediting community colleges and the reasons for doing so. The authors discuss the six NCATE standards, suggesting adaptations to fit the community college environment, as well as several models for accreditation of institutions delivering midpoint teacher preparation, that is, preparation up to the halfway point of four-year teacher education programs.

Without state support of two-year colleges' involvement in teacher education, these programs will founder. In Chapter Nine, Tricia Coulter and Edward Crowe provide an overview of state-level policies affecting teacher education in the community college and discuss state policy issues concerning the role and extent of community college involvement in teacher education. They also suggest ways that states can encourage greater cross-system collaboration among K–12 institutions, community colleges, and universities to promote system solutions to the related crises of teacher supply and teaching quality in the United States.

Concluding this volume, Dean Gerdeman offers information in Chapter Ten about sources and key resources for developing our understanding of the community college's role in teacher education.

Collectively, these chapters illustrate the extent to which community colleges have become major players in teacher education, not only in the traditional way of providing the first two years of a four-year teacher education degree but in such nontraditional ways as offering associate and baccalaureate degrees in teacher education and providing alternative certification programs. In addition to examining the various types of community college teacher education initiatives, these chapters also address the benefits and risks involved in this renewed expansion. Given this nation's projected need for between 2 and 2.5 million new teachers by the year 2008, there is no doubt that there is a place for community colleges in providing well-prepared teachers for our schools. How individual institutions participate in teacher preparation, however, depends on a variety of local, regional, and state factors. It is hoped that the chapters in this volume will provide useful information to those interested in improving and expanding the community college role in teacher education.

Barbara K. Townsend
Jan M. Ignash
Editors

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This chapter examines the current role of community colleges in preservice and in-service teacher education, including the development of the associate of arts degree in teacher education, the community college baccalaureate in teacher education, and alternative certification programs. Factors influencing future trends and predictions and recommendations about the community college's future role are also discussed.

Community College Roles in Teacher Education: Current Approaches and Future Possibilities

Barbara K. Townsend and Jan M. Ignash

The current teacher shortage facing the United States is sending waves of panic throughout the educational system. A number of factors have contributed to this shortage, including an explosion in the number of K–12 students and recent legislation in many states, such as California and Florida, mandating fewer students in K–12 classes. Although small classes are conducive to student learning, having more small classes means hiring more teachers to staff them. Other factors contributing to the teacher shortage include a massive dropout rate among beginning teachers and a high projected rate of retirement among experienced teachers. Of those beginning teaching in 1993–94, almost 10 percent dropped out of teaching within three years (Quality Counts 2000, 2002). Data from recent surveys indicate that the departure rate for teachers is 13.2 percent a year, whereas the comparable rate in many other professions is 11 percent (Viadero, 2002). The National Commission on Teaching and America's Future reports that more than 30 percent of all teachers leave within five years. In large urban districts it is 50 percent. In citing these percentages Vartan Gregorian (2001), president of the Carnegie Corporation, states that "our public schools leak talent like a sieve." In addition, those who persist eventually retire and need to be replaced. The U.S. Department of Education anticipates the retirement of almost 40 percent of current teachers by 2010 (Allen, 2002).

Whatever the reasons for the teacher shortage, the need for between 2 and 2.5 million more teachers to enter or reenter K–12 classrooms by the

end of this decade is real (Darling-Hammond, 2000; Feistritzer, 1998; Hussar, 1999). In addition, more teachers of color are needed to reflect the racial and ethnic composition of current K–12 students. More than one-third of students in schools today are of color (U.S. Department of Commerce, 1996), compared to only about a tenth of teachers (Snyder, Hoffman, and Geddes, 1998). The shortage of teachers of color in urban schools, particularly in the areas of math, science, and special education, is particularly troubling (Recruiting New Teachers, 2000, 2002). Most of the current teacher shortage is at the high school level, in math, the sciences, special education, technology education, and bilingual education, and in inner cities or the more isolated rural areas. Contrary to conventional wisdom, there is a national oversupply of elementary education teachers (National Center for Education Information, 2002).

Given the teacher shortage, national, state, and local leaders are now seeing the community college as an important resource in increasing and maintaining the teaching force. The community college enrolls more than 40 percent of all undergraduates as well as the highest proportion of students of color in higher education. Additionally, urban community colleges are excellent recruiting sites for urban K–12 teachers because urban community college students "may be less prone to the culture shock that affects many teachers from outside the urban community" (Recruiting New Teachers, 2002, p. 15). Also, K–12 teachers are typically the first in their families to attend college, and many community college students are first-generation college students (Recruiting New Teachers, 2002). Many community colleges also have strong ties to local high schools and could recruit future teachers through links with such high school groups as Future Teachers of America.

In this chapter we describe the community college's traditional role in teacher education, the ways in which this role has expanded in the past few years, and the factors that have influenced this increasing role. We will also reflect on the degree of controversy and kinds of criticism associated with the expanding role. In concluding the chapter we predict likely scenarios in the coming decades.

Traditional Role in Teacher Education

Preparing teachers has long been part of the community college mission. A number of early junior colleges had their roots in normal schools or teacher preparation schools (Witt, Wattenbarger, Gollattscheck, and Suppiger, 1994). Also, during the first part of the twentieth century, many private junior colleges offered teacher education as one form of semiprofessional education. During that time period, particularly in Missouri and the southern states, a teacher could be certified after two years of college education that included teacher education courses (Koos, 1925).

When requirements for teacher certification increased to include a four-year degree, the role of community colleges became primarily to help

prepare undergraduate teacher education students through the colleges' traditional transfer mission. Community college students seeking a bachelor's degree in teacher education could transfer some or all of the first two years of a bachelor's degree. Although community colleges in some states, such as New York and Mississippi, do not currently offer teacher education courses, in 1996–97, almost 10,000 associate degrees and over 1,000 community college certificates in education were conferred (Phillippe, 2000).

Over the years, individual community colleges and four-year schools have partnered to develop various kinds of articulation agreements to support this traditional role. One type of agreement articulates how a general associate of arts degree fits within a baccalaureate in teacher education. Community colleges offering beginning teacher education courses have also developed programmatic 2+2 teacher education articulation agreements with one or more four-year schools (see Chapter Three for examples of these agreements in California and Florida). In some states, such as Illinois, courses are offered and articulated according to a statewide articulation agreement that provides students majoring in elementary, secondary, early childhood, and special education with specific guidelines about the courses in general education and the major that will transfer to the four-year institutions that are parties to the statewide agreements.

Reaching agreement about transfer of community college education courses is sometimes problematic because some four-year institutions do not start their teacher education program until the junior or even senior year. In these programs, accepting community college teacher education courses would mean accepting lower-division courses into an upper-division program. Although the concept of 2+2 agreements in teacher preparation is consistent with the community college's transfer mission, the actual implementation of these agreements may be controversial as issues of what education courses transfer and how many should transfer are considered.

Associate Degree in Teacher Education

Developing and maintaining articulation agreements is time consuming but necessary as long as community colleges are not participants in a statewide articulation agreement that addresses the teacher education associate degree. Maryland is leading the way in developing an associate degree in teacher education (see Chapter Four), motivated partly by the desire for greater system efficiency. Prior to the development of this associate of arts in teacher education, an estimated 300 individual articulation agreements had been negotiated by Maryland community colleges and four-year public and private schools with teacher education programs ("Amid Teacher Shortages," 2001).

Some four-year colleges' willingness to support the development of an associate degree in teacher education and transfer this degree into their teacher education programs may reflect recent changes in the accreditation

of four-year programs. In 2000, the National Council for Accreditation of Teacher Education (2002) (NCATE), the major professional teacher education accrediting body, began using a results-oriented, outcomes-based model of assessment. This model supports the development of midpoint teacher preparation outcomes (see Chapter Two for information about the development of such outcomes in Missouri). Using midpoint preparation student outcomes as the end point for their teacher education programs, community colleges can develop a program that will articulate clearly and cleanly with four-year teacher education programs that also have established midpoint student outcomes (see Chapter Eight).

With the exception of those four-year institutions whose teacher education programs do not start until the junior or senior year, the associate degree in teacher education is likely to be acceptable to the four-year sector. One argument used within the two-year sector against the degree is that its creation adds to the proliferation of areas for associate degrees. In 1984, the American Association of Community and Junior Colleges, now known as the American Association of Community Colleges (AACC), issued a policy statement opposing this proliferation. However, the current AACC president has been quite active in support of an increased role for community colleges in teacher education, including the development of an associate degree in this field.

Although some four-year institutions are still reluctant to accept transfer students with community college teacher education courses, many senior institutions are grateful for the enrollments, and some are even enthusiastic about accepting these students from the particular two-year colleges with whom they have developed teacher education articulation agreements. What four-year schools may be less willing to accept are three emerging teacher education roles of community colleges: the provision of a baccalaureate in teacher education, of alternative certification programs, and of in-service professional development for teachers.

Baccalaureate in Teacher Education

The development of a community college baccalaureate in teacher education is part of a broader effort on the part of some community colleges to develop programs in response to local or statewide workforce needs and to improve access to the baccalaureate. Several states, such as Florida, Nevada, and Utah, have passed legislation permitting certain community colleges to offer the baccalaureate degree in selected fields. Indeed, a national organization devoted to furthering the development of community college baccalaureates has sprung up: the Community College Baccalaureate Association.

Advocates contend that the community college baccalaureate is a logical step to serve a student population unfamiliar with higher education. According to Kenneth Walker, a major advocate of this new degree, these

students "are not always interested in, or capable of transferring to, traditional baccalaureate colleges or universities" (Walker, 2001, p. 19). Pursuing a bachelor's degree at a community college is financially and psychologically more feasible than attending a senior institution for many of these students. Additionally, community college students will have access to a baccalaureate in certain specialized vocational areas that most senior institutions are not able or willing to offer.

Those who oppose the community college baccalaureate are concerned about its impact on the community college mission and perceptions that it may be considered inferior to a baccalaureate from a four-year college or university (Manzo, 2001). It is not clear who would consider the degree inferior, however. Concerns about effect on mission are more compelling and are sometimes linked to the fear that community colleges offering baccalaureates would focus less on their transfer function or maybe even seek to eliminate it (Skolnik, 2001).

Within this context, development of a community college baccalaureate in teacher education is a dramatic, nontraditional, and controversial way to increase community college involvement in teacher education. The baccalaureate-offering community college is no longer a partner with four-year colleges in offering teacher education but rather a competitor. Also, accrediting issues will arise, not only with the community college's regional accrediting association but also with NCATE and the other key accreditor of teacher education, the Teacher Education Accreditation Council (TEAC). (See Chapter Eight for further discussion of accreditation issues). Applying four-year accreditation requirements for teacher education to two-year institutions would have an impact on the rest of the institution. The teacher education program would need faculty with doctoral degrees and some interest in conducting research about teacher education. Most likely these faculty would be paid more than the average community college faculty. Thus implementation of a baccalaureate in teacher education could result in a two-tier system of community college faculty, with a possible impact on the community college mission.

Alternative Certification

In addition to the projected need for between 2 and 2.5 million teachers within this decade, requirements aimed at improving the quality of the teaching force have also put pressure on providers of teacher education to do more—and do it quickly and well—thus the need for alternative routes to teacher certification.

The speed with which colleges and universities can prepare new teachers, however, is not the only consideration. The recent reauthorization of the federal Elementary and Secondary Education Act, titled the No Child Left Behind Act, takes care to address the issue of quality in teacher preparation. The act specifies that each state that receives assistance under the act

is required to "ensure that all teachers teaching in core academic subjects within the State are highly qualified not later than the end of the 2005–06 school year" (Title 1, Pt. A, Sub-Part 1, §1119(a)(2)). Alternatively certified teachers need to be just as effective in the classroom as those who go through traditional teacher preparation programs.

Types. The question is then, are they? That may depend on the *type* of alternative teacher certification program. High-end programs target persons who already hold a bachelor's or postgraduate degree in a field other than education. Participants in these programs, like those in the Collin County Community College District program, attend formal instruction in education and teach with a mentor (see Chapter Seven). Another type of high-end program also targets baccalaureate degree holders but is tailored to individual students. Participants' transcripts are analyzed, and their required coursework and in-service training are individually designed. These types of alternative certification programs also employ effective features that may not be found in more traditional teacher education programs, such as year-long teaching internships under the guidance of a practicing teacher-mentor. The effectiveness of the teachers who complete these programs has alleviated some of the concern over quality. A 2000 Fordham Foundation report also states that "most researchers have concluded that alternative route teachers are at least as effective as their conventionally-trained counterparts, if not more so" (Kwiatkowski, 2000, p. 1).

Another type of alternative certification, emergency credentialing, is more expedient but provides little or no education and training before new recruits enter the classroom, often without any on-site support or supervision. The new teacher enrolls simultaneously in traditional teacher education coursework to earn eventual full certification. As of July 2002, forty-five states and the District of Columbia had some form of alternative teacher certification program (National Center for Education Information, 2002). Writing from the North Carolina perspective, Governor James B. Hunt Jr. and University of North Carolina president Molly Corbett Broad note that "painful as it is to admit, North Carolina, like several other states, has legislated some 'quick fixes' to help alleviate the teacher shortage. Some of these legislative actions tilt too far in the direction of addressing quantity without equal concern for quality. Emergency certificates and other approaches may help fix the quantity problem temporarily but make the quality problem worse" (Hunt and Broad, 1999, p. 2).

Concerns. A common criticism leveled at community colleges offering alternative teacher certification programs is that most of the faculty who would teach in these programs do not possess doctoral degrees. Also, some see community college provision of alternative teacher certification as "mission creep," that is, an expansion of a college's role in higher education beyond what it should be. An additional concern about providing alternative certification programs is their cost. One study found that preparing a teacher

in one of the better alternative certification programs cost approximately 75 percent more than if that teacher had been prepared in a traditional program (W. Hawley, discussed in Kwiatkowski, 2000).

Benefits to Students. A real benefit to students in alternative certification programs offered by community colleges is that community colleges are experienced in providing effective learning opportunities for nontraditional students. A majority of the participants in alternative teacher certification programs are nontraditional students. The National Center for Education Information has reported that compared to recent college graduates who went through traditional teacher education programs, entering teachers from alternative teacher certification programs tended to have degrees with majors other than education and to have work experience in occupations other than education. They were also likely to be older and to be people of color (National Center for Education Information, 2002). The characteristics of students in alternative teacher certification programs are very similar to the characteristics of today's community college student population in general.

Community colleges are known for providing a supportive environment for student learning, and highly effective alternative teacher certification programs are usually developed on a cohort model (Feistritzer, 1999), with peers supporting each other through coursework and through internship teaching. Where community colleges can step in to fill the demand for teachers in their region through alternative certification, they should certainly be considered appropriate providers. Well-designed alternative certification programs are definitely preferable to emergency credentialing accompanied by little or no training.

Professional Development and In-Service Teacher Education Programs

Data show that schools can expect to retain only between one-third and one-half of their beginning teachers for at least five years (Gregorian, 2001). Continuing professional development can serve a number of purposes, not least of which is to provide teachers with the support they need in their first years of teaching. Additionally, professional development provides new knowledge in subject areas and pedagogy for both beginning and experienced teachers. This may be especially critical for teachers with emergency credentials.

Many community colleges have provided professional development courses and programs for teachers for some time. Common development areas are the use of instructional technology, of methods of infusing math, writing, and critical thinking concepts into the classroom, and of teaching methods and strategies for special populations, such as non-heritage-language English speakers. Some states target special knowledge areas for teachers. For example, California allows teachers to count professional development activities in

tolerance and first aid toward the number of state-mandated hours they must have (Hirsch, Koppich, and Knapp, 2001, p. 40).

The results of a 1996 survey revealed that only 37 percent of teachers thought their education courses and in-service activities were "very valuable," and 44 percent found them "somewhat valuable" (Feitstritzer, 1999). Considerably more could be done to support professional development for practicing teachers. "On-site coaching, study groups, graduate coursework, instructional supervision, observation of master teachers or model programs at work, and participation in professional networks or curriculum development work" are activities recommended in a report by the Center for the Study of Teaching and Policy (Hirsch, Koppich, and Knapp, 2001, p. 38). The report goes on to note that the quality and duration of the professional development is as important as the type of activity, with brief, "one-shot" workshops far too common. It is this latter aspect of professional development that community colleges could help to improve, with their history of strong, sustained community relationships and partnerships.

A drawback to community college delivery of professional development for teachers is that community colleges cannot award graduate level credit, which teachers typically need to advance on the pay scale and maintain their teaching certificates. In Mississippi, for example, the state underwrites graduate coursework for teachers serving in geographical areas with teacher shortages, by providing scholarships for master's degrees for these teachers (Hirsch, Koppich, and Knapp, 2001, p. 39). Until reward systems expand to allow community colleges to participate more fully in professional development activities for teachers, the community college role may be more limited than it need be. Additionally, some four-year institutions may fight this professional development role because it would make the community college their competitor.

Federal and State Support

Strong arguments exist for making the community college a bigger player in teacher education. Federal and state officials seem convinced by these arguments, because federal and state support of community college involvement in teacher education has increased dramatically over the past decade. At the federal level the National Science Foundation (NSF) has provided grant funding for two-year and four-year college partnerships to prepare teachers in science, math, and technology. For example, the Teaching Scholar Partnerships are current NSF-funded efforts that have involved ten community colleges and eighteen four-year institutions in a pilot project to improve K–12 math and science education and recruit undergraduate students who are potential math and science teachers (Felice and Barnett, 2002). Through its Advanced Technological Program, NSF has sought to fund Articulation Partnerships that will improve two-year college preparation of prospective middle school and high school mathematics, science,

and technology education teachers as well as develop in-service programs that would result in current teachers becoming certified in mathematics, science, or technology (National Science Foundation, 2000). NSF has also funded in-service and professional development of teachers in a model program led by the University of Illinois at Chicago in partnership with six community colleges (Evelyn, 2002).

Many states are seeking to increase the community college role in teacher education, either through traditional means such as articulation agreements or nontraditional means such as enabling community colleges to offer a baccalaureate degree or provide alternative certification in teacher education. Those states most willing to experiment with increasing the role of community colleges in teacher education seem to be those with the greatest teacher shortage. Such states include California, Texas, and Florida, whose community college teacher education efforts are discussed in other chapters, as well as Nevada and North Carolina (Recruiting New Teachers, 2000).

What the Future Holds

Making predictions about the future of community college involvement in teacher education is easy, because the variation among community colleges ensures that any prediction will come true for at least a few institutions. Rather than just make predictions, however, we prefer to make predictions with recommendations that will apply broadly.

The traditional role of the community college in teacher education will continue, but there needs to be greater state-level coordination of cross-institutional teacher education efforts, especially the development of articulation agreements (Moore, 2000). At the most basic level, each state should maintain an electronic repository of institutions' individually negotiated, 2+2 teacher education articulation agreements. Those states motivated by concern for greater systemic efficiency should encourage the development of fully articulated teacher education majors through existing associate degrees, with specific guidelines about general education and major courses, or the development of an associate of teacher education degree that would be accepted by all the state's public senior institutions and ideally by the private schools within its borders as well.

Development of community college baccalaureates is a drastic step in blurring mission lines between sectors, with the community college teacher education baccalaureate but a small piece of the bigger issue. Although the need for more teachers has been one of the arguments used to advance the cause of the community college baccalaureate, users of this argument need to remember that it is time bound. There have been teacher shortage crises before, followed by teacher gluts. After perceptions of the current teacher shortage wane, the community college baccalaureate could endure as a monument to those perceptions at the possible expense of the community college mission and culture. It is vital

that states authorizing these degrees conduct longitudinal studies of the effect of offering baccalaureate degrees upon the community college. States also need to compare graduates of community college baccalaureate and four-year teacher education programs on measures such as scores on state and national teacher education examinations and retention in the K–12 workforce.

Alternative certification programs, whether offered by two-year or four-year colleges, are nontraditional paths that like the community college baccalaureate in teacher education, have been prompted by the current teacher shortage. Once the crisis is over, alternative certification will have enmeshed itself in the system of teacher education. As with the community college baccalaureate, states need to study the effects of alternative certificate programs and compare the performance of their graduates with that of the graduates of more traditional programs. In states where community colleges may offer in-service programs, teacher satisfaction studies need to be conducted, particularly among those teachers who have also participated in in-service activities at four-year institutions.

Conclusion

With a long history of participation in teacher education, community colleges are now branching out and extending their efforts past the traditional ones of providing the first two years of an undergraduate degree in teacher education. In some states these new efforts may be sufficient if a fully articulated A.A. degree in teacher education program or an associate degree in teacher education is developed. In other states more nontraditional and controversial efforts are desired and legislated. Community colleges offering a baccalaureate degree in teacher education or providing alternative teacher certification have moved beyond the traditional boundaries of offering courses and programs conceived of as appropriate for freshmen and sophomores. Some may view these efforts as inappropriate encroachments on senior institutions' territory. Others may see these efforts as entirely appropriate and fitting, given the status of education as a field and the reluctance or inability of some four-year institutions to meet pressing state-level needs to prepare more teachers. What is certain is that community colleges are now important voices in decisions about how best to prepare K–12 teachers. Their willingness to tread nontraditional paths in degree and program offerings means that the range of teacher education preparation programs will be increased in creative ways, enabling more students to become teachers.

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The national teacher shortage has made it imperative for two- and four-year colleges to collaborate in facilitating transfer of education majors. This chapter focuses on some of the challenges to transfer and articulation in Missouri.

Transfer Issues in Preservice Undergraduate Teacher Education Programs

Joyce Lindstrom and Katherine D. Rasch

Amanda, Joe, and José are students at Missouri community colleges. Amanda has known since she began her postsecondary academic work that she would transfer to the local public university. Therefore she initially met with advisers at both her community college and the university to plan her coursework. However, because Amanda's child-care responsibilities limit the number of hours she can take each semester, by the time she is ready to transfer, her advising is three years old. When she arrives at the university with a complete transcript of her A.A. degree, she learns that two of the education courses she took at the community college are no longer accepted as equivalent courses at the university; they are now accepted as electives, and she must repeat the courses at the university. At the first class for one of these courses she discovers that the instructor is the same adjunct instructor she had at the community college last semester.

Joe did not know what he wanted to be when he started at the community college. He took a number of general education courses and then decided to take an introductory professional education course to investigate becoming a teacher. Joe's classroom observations in a middle school convinced him that he would like to teach middle school math. In meeting with advisers at the community college, he learns that although all of his general education courses will transfer to any Missouri four-year school he might choose, some of them do not meet the state-mandated general education guidelines for preservice teachers, so he must take additional courses.

José is taking the first semester of Structures of Real Numbers, a two-semester math course for teachers. When he tries to register for the second

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semester of the course at the community college, he is told that he must take it at the four-year institution because he has already taken as many community college hours as the transfer institution will allow. Even though the course has been articulated for transfer to the four-year institution, for José, the course is not transferable.

These three actual student experiences present typical barriers faced by education majors who begin their postsecondary preparation at a community college. Even though each student met with advisers and was assured that his or her transfer would go smoothly, their experiences were frustrating and unnecessarily complicated. Prospective teachers who begin at a community college, it would seem, all too often face similar experiences in transferring. To address this situation the National Science Foundation (1998) recommends that "[t]wo-year colleges should collaborate with four-year colleges and universities and school systems to. . . . [e]liminate the barriers of course transferability by articulating transfer agreements between two-year colleges and four-year institutions that are mutually established through open communication concerning specific course content and expectations" (p. v). This chapter addresses these barriers by examining some concerns and recommendations for the transfer of both general education and professional education courses. To illustrate some of the transfer and articulation issues in teacher education, the chapter describes benefits and challenges faced by education majors in the state of Missouri.

Concerns About Articulation

In a recent report the American Association of Colleges for Teacher Education (2002, p. 1) (AACTE) recognizes that "as they have for at least a century, two-year colleges can and ought to play a role in the recruitment and preparation of quality teachers." However, this report also points out that teacher education students in community colleges face more challenges than their four-year counterparts: "Since students in a particular two-year college may transfer to more than one institution in the state there are often problems of alignment and transfer. In many states, general education requirements vary by institution and there may not be a system for determining equivalencies across institutions. As a result, students in community colleges may find upon transferring that not all their general studies courses count towards the education degree" (p. 1).

One fundamental question to be considered before transfer and articulation agreements can be designed is, who is the primary beneficiary of the agreement—sending institutions, receiving institutions, state agencies, local education agencies, or preservice teachers? AACTE clearly identifies the focus of such agreements as the preservice teachers in its assertion, "Providing a seamless transition for prospective educators is key to increasing the number of those who complete a professional education program" (p. 5).

Even though meeting students' needs is the highest priority, institutional concerns must also be addressed. Both two- and four-year institutions are currently caught in a maze of accountability, conceptual frameworks, and changing funding policies. For example, at the same time that four-year institutions are expected to develop innovative curricula and assessment plans around distinctive curriculum philosophies in compliance with state and national standards, they are also expected to collaborate with community colleges that may have different conceptual frameworks. Will collaboration restrict the variety of program options that different types of institutions might develop? Or will the disparities between the two- and the four-year institutions preclude collaboration? Without collaboration, four-year schools are less competitive in the market for the increasing pool of transfer students. How can institutions and policymakers find the balance between collaboration and maintaining the distinct identity of each institution?

Some four-year institutions are reluctant to collaborate with two-year institutions because they perceive that expanding the role of community colleges adds to the accountability burdens of four-year institutions whereas "community college teacher educators are both exempt from these accountability expectations and not conversant with the national student standards movement. . . . Four-year institutions are also concerned about being held accountable for the performance of students whose general education and basic skills development occurred at other institutions. Given these factors, accreditation demands, and the pressure to show value added, four-year institutions are sometimes reluctant to embrace their two-year counterparts" (AACTE, 2002, p. 3). Conversely, the recent funding patterns of agencies interested in improving the preparation of teachers, such as the National Science Foundation, show that these organizations are rewarding collaborations between two-year and four-year colleges (St. Charles Community College, 2002). Given the current budget challenges throughout higher education, the lure of grant funds is encouraging some four-year institutions to look for ways to address their concerns and work toward collaboration.

The AACTE report recommends that member institutions (1) develop one-to-one articulations and dual admissions or dual enrollment programs, (2) embrace innovative models of delivering instruction, (3) hold transfer students to the same standards as they do four-year students, (4) take third- and fourth-year programs to community college campuses, and (5) promote joint faculty development systems (AACTE, 2002).

AACTE also suggests that state departments of education and higher education executives foster collaboration between two- and four-year institutions, including "system interaction between two- and four-year colleges to determine course equivalencies across institutions in the general education component (e.g., Florida, North Carolina and New Jersey) and in professional education, articulation or joint admissions agreements, and incentives and funding for innovative programs that foster partnership and seamless transition for students between two- and four-year colleges" (p. 4).

Efforts in Missouri

In the mid-1980s, teacher educators in Missouri recognized that education majors who began their postsecondary academic work at a community college were at a disadvantage when they transferred to the state's various four-year institutions compared to students who began their work at a four-year school. The four-year students usually took several professional education courses during their freshman and sophomore years, whereas the community college students did not and therefore often took longer to graduate than the four-year, or native, students. Consequently teacher educators began to take steps to address this problem.

Step 1: Specific Courses Approved. Beginning in 1988, the Missouri State Board of Education addressed this inconsistency by identifying seven professional education courses that community colleges in Missouri would be allowed to teach (Introduction to Classroom Teaching, Art for Children, Physical Education for Children, Music for Children, Children's Literature, Child Psychology, and Adolescent Psychology). Some community colleges were grandfathered in to teach an eighth course, Foundations of Education. Of these twenty-one (or twenty-four) credit hours, a student could transfer up to fifteen to a state-approved four-year education program. The rationale for the choice of these specific courses is unclear, but a common thread seems to be that most of these courses were taught outside four-year schools of education.

Community college teacher educators prepared self-studies of their professional education offerings, and the Missouri Department of Elementary and Secondary Education (DESE) conducted on-site approval visits approximately every five years. DESE approval was granted to individual courses rather than to programs because there was a consensus in the state that community colleges did not have coherent professional education programs. Ten Missouri community colleges currently offer DESE-approved professional education courses on fifteen campuses (Missouri Department of Elementary and Secondary Education, 2001). Without DESE approval, Missouri community colleges are not allowed to offer professional education courses.

Step 2: Standards Developed. In 1999, Missouri responded to the national standards movement by adopting a new approval process, the Missouri Standards for Teacher Education Programs (MoSTEP), for the four-year education programs in the state. These standards, modeled after the Interstate New Teacher Assessment and Support Consortium standards, include previously considered measures such as syllabi, faculty degrees and activity in professional organizations, library collections, and budgets; they also include general education and professional outcome competencies for graduating students as documented in student portfolios. The requirements of previously specified general education and professional education courses were not eliminated when beginning teacher

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competencies were instituted (Missouri Department of Elementary and Secondary Education, 1999).

Step 3: Statewide Articulation Committee Formed. Community college standards for professional education program approval were not revised in conjunction with the four-year MoSTEP revision. Rather, as the process for applying the MoSTEP standards to four-year institutions was being finalized, it became apparent that curriculum revisions at the four-year level were compromising existing transfer and articulation agreements operating under the old system. Therefore the Department of Education formed the Statewide Teacher Education Articulation Project (STEAP) to study the program approval process for two-year colleges.

STEAP defined mid-preparation benchmarks in the MoSTEP standards that would be the basis for two-year colleges' program development and approval. Based on STEAP's work, the State Board of Education eliminated, as of March 2001, the previous specification of the courses and the number of hours in professional education that could be taken at the community college level (Missouri State Board of Education, 1988; 2001). Community colleges were then "able to create teacher education programs whose general education and teacher education preparation equate, on exit, to mid-level preparation" of preservice teachers (Teacher Education Articulation Advisory Committee, 2001, pp. 1–2).

STEAP (2001) recommended that teacher education programs should include the following areas in their first two years: (1) general studies in the liberal arts and sciences, (2) technology, (3) human growth and development (life span), (4) nature of learners and learning, (5) classroom management, and (6) exploration of the profession. Another recommendation was that all areas of program emphasis should include "observation, inquiry, critical thinking, reflection, communication, technology, diversity, and assessment" (pp. 6–8).

Because several of the STEAP competencies were not embedded in the previously prescribed community college courses and because community colleges' professional education offerings were not coherent programs, every community college in the state needed to develop a conceptual framework, revise its curriculum, and add courses that addressed the competencies. Courses that covered the educational uses of technology (both functional and instructional), theories of human growth and development, and an introduction to assessment were added on several community college campuses. Capstone portfolios began to be required of two-year students (St. Charles Community College, 2002).

As community colleges completed curriculum revisions, they contacted local and statewide four-year institutions to establish articulation agreements that included their newly designed courses. These efforts met with varying responses. Recall that the four-year institutions had only recently revised their curricula to meet the MoSTEP standards. Now they were being asked to consider giving transfer credit to students who had taken courses at the

community college that resembled the courses the four-year institutions had so recently redesigned. When most of the students from a particular community college transferred to a single institution, institutional differences were resolved fairly easily. However, urban and suburban community colleges whose students transferred to numerous institutions faced a transfer quagmire: "Two-year institutions trying to serve multiple transfer institutions may be in a position where one or more institutions accept only their current offerings, others only the new offerings, and still others some or all of both current and new offerings. When a four-year school that serves as the primary receiving institution for a two-year school chooses to accept only current courses, the two-year school has no way to design and implement a program that institutes the mid-preparation benchmarks" (Teacher Education Articulation Advisory Committee, 2001, p. 2).

Step 4: Advisory Committee Created. The *Missouri Coordinating Board for Higher Education Transfer Policy*, adopted on June 8, 2000, and binding on all institutions receiving state funds, states as its first guideline that "[n]either transfer nor native students should be advantaged or disadvantaged as a consequence of the transfer process" (Missouri Coordinating Board for Higher Education, 2000, p. 2). Thus the unequivocal position of policymakers in Missouri is that the primary interests to be considered in transfer and articulation policies are those of the students, not those of institutions.

In December 2000, recognizing that community college transfer students were facing difficult challenges, the transfer and articulation committee of the Missouri Coordinating Board for Higher Education (CBHE) created the ad hoc Teacher Education Articulation Advisory Committee (TEAAC). The CBHE's emerging interest in teacher education raised questions in teacher education programs throughout the state about which state agency had ultimate authority and how well the two agencies would communicate and cooperate in the oversight of teacher education programs.

The advisory committee had eighteen members: seven from public two-year colleges, one from a private two-year college, four from private four-year colleges, and six from public four-year colleges. Members were from colleges scattered across the state; twelve were administrators, three were faculty, and three had both faculty and administrative assignments. Representatives of strong teacher education programs were intentionally recruited for membership. TEAAC was charged with the following responsibilities: (1) "Identifying problems and concerns involving relationships between and among two- and four-year institutions in the preparation of new teachers as [they affect] students' ability to transfer"; (2) "Identifying emerging issues concerning the alignment of institutional general education programs with current teacher education degree requirements" (TEAAC, 2001, p. 1). TEAAC was also asked to consider the possible impact of recent changes in both professional and general education requirements at the state level.

Recommendations of the Advisory Committee

Asked to complete a survey about transfer patterns, issues, and concerns, the committee members and their respective institutions identified the following concerns and made recommendations to address them.

Academic Preparation of Transfer Students. Although four-year schools are concerned about the academic preparation of two-year transfer students, little research has been done to validate or allay these concerns. TEAAC recommended research to track the performance of students who have transferred into four-year education programs from either two-year or other four-year schools.

General Education. Effective in 2000, the CBHE adopted a new general education model that sets broad state-level general education goals while allowing individual institutions to define relevant competencies, thus giving colleges more latitude in creating general education courses and in defining requirements (Missouri CBHE, 1999).

Until postsecondary institutions have identified the specific competencies to meet the education goals set by the state, they cannot articulate which general education courses will be appropriate for teacher education students (TEAAC, 2001; Missouri CBHE, 1999). Also, "a teacher education student who is not well advised about general education or a student who does not initially declare a teacher education major may fail to fulfill all the general education requirements for teacher education at the time of transfer" (TEAAC, 2001, p. 4).

At least four sets of requirements now influence the general education of education majors. First, as indicated in its *Higher Education Transfer Policy*, the Missouri CBHE (2000) established general education guidelines for all public institutions of higher education. Private schools could also choose to become signatories to the agreement. Next, the Missouri Department of Elementary and Secondary Education, the state agency that grants teaching certificates, established a list of required general education courses. This list is more restricted than CBHE's (for example, it calls for American History rather than History). Also, in addition to the recommended *coursework*, DESE established general education *competencies* required of beginning teachers. Finally, before being officially admitted into a four-year teacher education program, each candidate must pass the College Basic Academic Subjects Exam (C-BASE). Consequently the advisory committee recommended that the "DESE commission research to investigate the alignment among these various general education requirements," noting that "until these general education requirements are aligned at the state agency level, education majors must be carefully advised into courses that will meet agency requirements and also prepare them to pass the C-BASE" (TEAAC, 2001, p. 5).

Disincentives to Collaboration. TEAAC identified three major disincentives to collaboration among two-year and four-year colleges. The first

one is that students often transfer before they complete the A.A. degree. Although few students complete the A.A., achievement of this degree tends to be the basis of transfer and articulation agreements. Consequently both two-year and four-year institutions are reluctant to invest time and energy in developing agreements that will affect only a few students.

Four-year institutions' late-entry program designs or education programs that do not start until a student's junior or senior year of college, or even until the graduate level, can act as another major disincentive to collaboration. Because their native students do not take professional education courses until at least their junior year, institutions with such programs have not developed articulation agreements with two-year teacher education programs.

A third disincentive is misalignment of course and competency requirements. It is difficult to develop a single curriculum that fulfills both the professional education course requirements and the competency requirements of the DESE. Adding one or more community college curricula to the mix can make the task of delineating a transfer-friendly, four-year (or 2+2) course sequence appear so complicated that it discourages four-year schools from investing sufficient effort and resources in the project. The advisory committee recommended that every teacher preparation college in the state adopt the mid-preparation benchmarks of the MoSTEP standards, because standardizing what is expected of education majors at the two-year level, regardless of whether the coursework is completed at a two- or four-year institution, may facilitate collaboration. The state Department of Education could further simplify the alignment task by choosing between the established course requirements and the newer competency measures. TEAAC (2001) recommended that "DESE should proceed immediately to move from course-based teacher certification programs to a competency-based one" (p. 5). A clear, agreed-upon alignment of both professional and general education courses and competencies might also increase the number of students who complete an associate degree before transferring from a two-year college, by making students more confident that all work taken at the community college will count toward a four-year degree and teaching certificate.

Issues of Trust and Territory. "Issues of trust and territory remain and need to be acknowledged and addressed" (TEAAC, 2001, p. 5). Trust between institutions is always difficult to build and especially so when the development of trust appears to threaten territory.

One illustration of the developing change in attitude of four-year institutions toward community colleges is the change in approaches by one of the large state universities. In October of 1997, an associate dean in the College of Education at the university sent a letter to every community college in the state explaining that beginning with the fall semester of 1998, the university would no longer accept professional education courses in transfers from any institution, including both community

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colleges and other four-year institutions. That letter set off a spark that led DESE to form a statewide committee on teacher education articulation to define the mid-preparation benchmarks to the MoSTEP standards. As a result, the same institution initiated meetings with community colleges throughout the state during May 2002 to develop 2+2 education programs that would incorporate the entire A.A. degree, including up to twenty-one hours of professional education courses. Thus this major institution has made an about-face from rejecting all community college professional education coursework to accepting both established and revised community college curricula.

Advising Issues. With the proliferation of course and competency requirements and the involvement of multiple state agencies, it is a challenge to keep current with transfer and articulation issues. Because college advisers have many academic disciplines to keep track of, it is not surprising that advisers may not always have the latest information to give students. Also, information may be correct when it is given but become obsolete before students act on it. Care needs to be taken all along the information chain—the state Department of Education, the Coordinating Board for Higher Education, schools of education, advising offices, faculty, students—that information given is current and correct. Special care should be taken to encourage students to take courses that will prepare them for the C-BASE.

To facilitate the timely distribution of information, the advisory committee recommended that "[e]ach four-year college and university should develop and publish a statement about the teacher education program requirements to be completed by students who transfer with an A.A. degree in a state-approved teacher education program" (TEAAC, 2001, p. 6), including the details of any bilateral articulation agreements as they are developed. This statement should be posted on the institutional Web site, "as well as on DESE's and CBHE's web sites" (p. 6).

Responsibilities of State Agencies. TEAAC (2001) recommended the development of "a statewide policy that graduates from a state-approved A.A. program in teacher education will achieve a baccalaureate in teacher education by meeting the same number of professional education credit hour requirements as do native students from the mid-preparation point" (p. 6). Additionally, the committee recommended that DESE and CBHE be charged with monitoring this policy's implementation.

Recommendation for Future Revisions. Finally, to avoid some of the chaos precipitated by adopting new program approval guidelines for four-year institutions before clarifying the role of community colleges in the new schema, TEAAC (2001) recommended that "[t]he next time the teacher education approval process is redesigned, both two-year and four-year institutions should be included as components of the same package, with teacher education program approval processes for both sectors developed at the same time" (p. 6).

Conclusion

The transfer and articulation of general and professional education courses are in a state of flux, even confusion. Criteria for the transfer of credit between two-year and four-year colleges derive from state and federal policymakers, funding agencies, and individual college policies. The current upheaval can leave administrators, faculty, and advisers unsure of the latest information and students vulnerable to misinformation, unsatisfactory advising, and unnecessary repetition of courses or course content. The confusion is most likely to be resolved one articulation agreement at a time between institutions whose faculties and administrators have decided to trust each other.

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3

This chapter describes the current teacher credentialing situation in California, the community college Teacher and Reading Development Partnership (TRDP) program, and six California community college programs dedicated to the elimination of an acute teacher shortage.

Taking the Golden State Path to Teacher Education: California Partnerships Among Two-Year Colleges and University Centers

Linda Serra Hagedorn, Fran Newman, and Janet Duffy

The thirty-four million inhabitants of the most populous state in the Union can boast of the state's powerful economy, miles of beautiful beaches, almost perpetual sunshine, and much more. However, in the area of education, the Golden State has recently appeared a bit tarnished. California is experiencing one of the severest shortages of credentialed teachers in its more than 150-year history. The state has been unable to produce enough teacher candidates to meet the demand created by growth in student enrollment, class size reduction legislation, and teacher attrition and retirements. Currently California is far from its goal of placing a qualified teacher in every classroom. It is short thousands of teachers, and the problem is disproportionately concentrated in urban and low-performing schools serving poor and minority students (Shields and others, 2000).

Ironically, one of the reasons behind the teacher shortage is recently enacted legislation that policymakers, parents, and others heralded as the key to California's educational excellence. In 1996, the state invested $1 billion to reduce K–3 classroom size and hire 25,000 new K–12 teachers (California Community Colleges, Chancellor's Office, 2002a). Although in the long run California's class size reduction goals will benefit the state's children, in the short run the legislation was shortsighted in neglecting to consider how or where the state would get so many qualified and credentialed teachers. Without an accompanying high level of teacher compensation, the state also has difficulty in attracting out-of-state teachers, due to

the state's high cost of living (Joint Committee to Develop a Master Plan for Education, 2002). This chapter describes California's efforts to find the solution to teacher shortages through the involvement of one of the state's resources—the California community colleges.

California Teacher Credentialing

A history of California teacher credentialing is beyond the charge of this chapter, but Table 3.1 summarizes the significant legislation that has evolved into the present structure of teacher credentialing. The chronology shows a steady progression toward a more specialized and trained teaching staff.

Legislation and the allotment of both state funds and federal grants are the responsibility of the state superintendent of public instruction, under the direction of the California Board of Education (California Department of Education, 2002). The Commission on Teacher Credentialing (CTC) awards credentials and certificates to candidates upon a recommendation from a CTC-approved institution of higher education in the state of California (California CTC, 2002). However, the state has responded to its recent severe teacher shortage by establishing emergency teaching permits. In the 1999–2000 school year there were more than 40,000 California teachers holding some type of emergency teaching permit, representing about 14 percent of all classroom teachers in the state (Shields and others, 2000, p. 36).

Teacher and Reading Development Partnerships Program

Although some of California's 108 community colleges were already offering introductory education courses, teacher assistant training, or internship experiences in local K–12 schools, until recently they had few programs that were articulated with four-year colleges or universities, an arrangement that is necessary if students are to obtain a teaching credential (California Community Colleges, Board of Governors, 2001, pp. 1–3). California governor Gray Davis emphasized that local availability and affordability of community college programs not only would attract more people into the teaching field but would also be a vehicle for increasing the diversity of teaching staffs (California Community Colleges, Chancellor's Office, 2002b). In the 1999–2000 budget, Governor Davis established the Raising Expectations, Achievement, and Development in Schools (READ) initiative, which provided $10 million to initiate partnerships for teacher education between community colleges and California State University campuses (Weahunt and Michalowski, 2000). The initiative also included local school districts and, in some cases, partnerships with other institutions offering teacher credentialing programs.

Table 3.1. History of Events of California Teacher Credentialing

Year	*Event*
Pre-1961	Credentialing controlled exclusively by the Department of Education's Bureau of Teacher Credentialing (BTC) through colleges, universities, and the California Teachers Association (CTA).
1961	SB57 (Fisher Act) Replaced the General Teaching Credential with the Standard Elementary and Secondary Credentials.
1968	State legislature initiated the Joint Committee on Teacher Credentialing Practices.
1969	AB122 (Ryan Act) Established the Commission for Teacher Preparation and Licensing (CTPL) and a system of examinations to test teacher subject matter proficiency.
1982	CTPL adopted plan to establish standards.
1987	Standards approved for multiple subject and single subject credentials.
1989	Morgan-Hart Class Size Reduction Act Reduced class size in Grade 9 English and other required courses for high school graduation.
1992	SB1422 CTC appointed advisory panel to examine the credentialing system.
1996	Initiative to reduce classroom size and hire 25,000 teachers
1998	SB2042 Established funding and the nine interim standards of quality and effectiveness for blended programs of undergraduate teacher preparation for multiple and single subject credentials.
1999	Program: Raising Expectations, Achievement, and Development in Schools (READ) Allocated $10 million for community college Teacher and Reading Development Partnerships (TRDP).
2000	AB 471 Set requirement that CTC annually report to the governor and the legislature the number of teachers who received credentials certificates, permits, and waivers.
2002	Legislature approved full funding for the Beginning Teacher Support and Assessment Program (BTSA).

Source: Adapted in part from Hendricks, 1986.

At the same time, the Chancellor's Office of the California Community Colleges formed the AmeriCorps Teacher and Reading Development Partnership (TRDP) project to jointly address the state's low K–6 reading scores and the teacher shortage. The AmeriCorps program included a service-learning component of fieldwork in which college students would tutor elementary students in reading (California Community Colleges, Chancellor's Office, 2002a).

The community colleges clearly showed their interest in the state grants through the submission of fifty-eight applications representing eighty-eight campuses, with some campuses submitting joint proposals (Weahunt and Michalowski, 2000). On June 26, 2000, thirty-three applications were

approved (Legislative Analyst's Office, 2001) in the three grant categories of program establishment (nine), program consolidation (nineteen), and program expansion (five). Program establishment grants were awarded to campuses without existing teacher preparation programs. Program consolidation grants were awarded to campuses that lacked a fully integrated program but had established a partnership with a California State University (CSU) or had a fully functioning basic tutoring or outreach program. Finally, program expansion grants were awarded to those campuses with a functioning integrated program and an established CSU partnership as well as tutoring and outreach programs involving K–12 districts.

As of spring 2002, the grants were in their second year of operation. Although the funding was cut from the original $10 million to $5 million, the program is supported by the California Community Colleges Board of Governors and the Chancellor's Office. Now that the program is functioning, additional colleges are gearing up to join it. In addition to the formal TRDP program, many community colleges in the state are operating other programs designed to assist students to enter the teaching profession.

Regardless of the program, students completing their two years of teacher preparation in a California community college save money. Whereas courses at a state community college are $352 per year for sixteen units per semester (only an $11 enrollment fee per credit unit), the comparative costs are $3,429 per year at a University of California campus and $1,965 per year at a California State University campus (Teacher Education at Coast Community Colleges, n.d.).

Programs with TRDP Funding

In this chapter we provide descriptive vignettes of six programs that represent the variety and unique interpretation of teacher preparation in California, based on our visits to the college. Of the six programs, three were awarded TRDP grants and three were operating independently. Each program is different in scope, organizational structure, size, and funding. In many cases the variations are reflections of the communities in which the colleges reside.

In providing vignettes of the three programs using TRDP funding, we begin with the description of a large and highly developed program, titled the Teacher Training Academy, at Cerritos Community College. We follow with two programs that both use the TRDP consolidation grants but that operate very different programs.

Teacher Training Academy (TRAC) at Cerritos Community College. Because Cerritos Community College operates one of the most comprehensive teacher partnership programs in California, its TRDP grant was of the expansion type, to allow the college to develop its Teacher Training Academy (Teacher-TRAC). This large, urban community college is located in the diverse city of Norwalk, California (approximately sixteen

miles from Los Angeles). The Teacher-TRAC program grew from the efforts of a faculty member who designed a course in the early 1990s specifically for those contemplating teaching math in elementary school (C. Shimazu, personal communication, Jan. 23, 2002). It soon became evident that there was sufficient student interest in the teaching profession for the college to launch a teacher preparation program. The Science, Engineering, and Math faculty member who designed the original math course became the director of the Teacher Training Academy and met with representatives from the nearby California State University at Long Beach (CSULB) to articulate a curriculum agreement for a teacher preparation program. Through these collaborative efforts a blended program was formed between the community college and the four-year institution.

To enter the program a student must make separate application to the Teacher-TRAC program, complete the Cerritos College Assessment Test Battery, be eligible to take the course Introduction to College Composition and an elementary (or higher) algebra class, submit unofficial high school transcripts (as well as any college transcripts if the student attended a previous college) indicating a GPA of 2.5 or higher, submit a typed one-page essay detailing why he or she wants to be an elementary school teacher, and schedule an appointment with an academic counselor.

Recruitment for Teacher-TRAC is regularly conducted in the district high schools as well as through a Web site, TRAC publications, the Teacher-TRAC Center, the Future Teachers Club, and other avenues. In addition, Teacher-TRAC is featured during Senior Day, College Night, and new student orientations. Teacher-TRAC has many components, including service learning and fieldwork experience, which is a requirement for the credential. Joint academic advising affords the student an opportunity to work with a Cerritos College counselor, an adviser specifically assigned to Teacher-TRAC, and also a CSULB Multiple Subject Credential Advisor. A very attractive feature is that all students officially admitted to Teacher-TRAC at Cerritos College are guaranteed a place in the Integrated Teacher Education Program (ITEP) at CSULB. In its fifth year of full operation, the Cerritos College Teacher-TRAC program has graduated more than 500 students.

The basic education courses Introduction to Teaching and Introduction to Education, formerly offered at the four-year institutions, are now available at Cerritos College, with full articulation to CSULB. The requirements for pedagogical training and the required forty hours of service-learning fieldwork are met through courses offered at the community college. Only those faculty members who have applied to and have been accepted as Teacher-TRAC faculty teach in the program.

Teacher Education Program at San Diego Mesa College. The president of San Diego Mesa College has cited the college's Teacher Education Program as one of the four key institutional directions for this campus located in California's most southern region (Human Resources Division, California Community Colleges, Chancellor's Office, 2002, p. 4). The only

source of outside funding for the program is a TRDP consolidation grant. The TRDP program at Mesa College focuses on student access, success, contact, and transfer. Students are provided with academic and career counseling through individual appointments with counselors and group presentations. Students also have access to additional teaching-related information on financial aid, test preparation, and testing, and through presentations by local four-year institutions' teacher credentialing programs (Human Resources Division, California Community Colleges, Chancellor's Office, 2002). Since the inception of the Teacher Education Program one year ago, a total of 637 community college students have been served by the TRDP grant (Human Resources Division, California Community Colleges, Chancellor's Office, 2002).

Efforts continue to institutionalize the Teacher Education Program. Increased interest by faculty and staff has resulted in more state-approved community college courses that allow the student to move seamlessly into the four-year institution and the earning of the teaching credential. San Diego Mesa College also has an active mentoring program that provides support and community college teaching opportunities for graduate students, especially those who are from underrepresented ethnic groups and are interested in community college teaching and counseling.

Educational Technology Program at Victor Valley College. Located in a desert area of the state known as the inland empire (about ninety miles northeast of Los Angeles), Victor Valley College is a semirural campus of 11,000 students. The campus is proud of how it has been able to accommodate its present unprecedented growth spurt and how it has developed recent partnerships with four-year institutions. Currently there are four accredited universities offering off-campus programs on the Victor Valley campus, allowing Victor Valley students to complete their teaching credentials and their undergraduate and graduate degrees without driving long distances.

We found the Victor Valley program to possess unique qualities, and we have included it in this chapter to demonstrate the variation in teacher preparation programs in the Golden State. The campus offers a seventeen-semester-unit, nontransferable certificate program in educational technology. The program receives funds from a TRDP grant (consolidation type), the Air Quality Management District, and the Victor Valley Foundation (Victor Valley College, 2001). A future goal of the college is to articulate the education courses as transferable to the universities.

This unique program attracts not only those interested in entering the teaching profession but also practicing teachers seeking to enhance their skills. According to the program coordinator, approximately one-third of the students in the program are practicing teachers. With classes frequently enrolling a mix of teachers, undergraduate students, and paraprofessionals, the college finds itself providing in-service teacher education as well as

preservice teacher education. Of the current approximately 150 students currently enrolled in the program, 24 graduated with an "educational technology certificate" in spring 2002.

Programs Without TRDP Funding

In the following three campus descriptions, we provide details of teacher preparation programs maintained without the benefit of TRDP funds. Each program is unique and focuses on separate goals.

TEACH at Los Angeles Trade Technical College. Administrators at the Los Angeles Trade Technical College (LATTC) applied the simple title of TEACH to the teacher preparation program that operates within this urban, highly diverse, downtown Los Angeles campus. LATTC is a middle-sized campus that has built its reputation among the trade and other occupational programs. TEACH, operating without the benefit of any special funding or TRDP, provides an avenue for the more than 15,000 teaching assistants in the Los Angeles Unified School District to a teacher preparation program to become credentialed teachers. Recognizing that the TAs are often balancing work and other responsibilities, TEACH makes the courses accessible by bringing them to the TAs' work sites. Thus "TEACH is a unique way for individuals to continue working and attend college full time" (Los Angeles Trade Technical College, 2001, p. 2). In addition to individual and financial aid counseling, as well as transfer assistance, TEACH provides a condensed curriculum that allows students to complete the lower-division requirements for a teaching credential in five semesters or less by attending classes two days a week. Successful TEACH students earn an associate of arts degree and transfer with CSU certification.

Transition to Teaching at Napa Valley College, with the Napa Valley Unified School District. Napa Valley College provides an example of the way some California community colleges have entered into special agreements with local school districts to launch their own attack on the teacher shortage. Although the Napa Valley Unified School District (NVUSD) has experienced little problem in hiring sufficient numbers of instructional assistants, it is experiencing an acute shortage of credentialed teachers. The district would especially like to hire more Hispanic teachers, to reflect the ethnic composition of the area and provide effective role models for the large numbers of Hispanic students. To realize this goal the NVUSD applied for and received a California School Paraprofessional Teacher Training Program grant from the CTC for its Transition to Teaching (TTT) project, in which it collaborates with a number of community service providers and institutions of higher education (NVUSD, 1999, 2000). Because Napa Valley College enrolls many Hispanic students from the college's service area, recruitment of Napa College students into the teaching profession ultimately results in increased numbers of Hispanic teachers.

The NVUSD assistant superintendent of human resources, who is responsible for the first two years of district teachers' support, has worked out a plan to employ the TTT project to "grow" the district's own teachers from its instructional assistant pool. The Transition to Teaching project is a three-pronged partnership for teacher preparation with Napa Valley College (NVC), the NVUSD, and two four-year colleges—Pacific Union College and Chapman College. In addition to its articulation agreements with Pacific Union College and Chapman College, Napa Valley College also works very closely with the NVUSD to provide a number of services to the students in the program. NVC provides assistance with filling out financial aid papers; offers a specialized billing system that goes directly to the district for tuition and fees to be paid through the grant; provides a reentry counselor, an expert in teacher credentialing who regularly meets with and monitors students' progress; and supplies tutors, a writing lab, and a transfer center. Though NVC has not created new courses for this program, it has adjusted its scheduling to accommodate students' work hours.

The NVUSD, under the leadership of the assistant superintendent, has coordinated the details of the program. NVUSD is flexible in providing release time with full pay for the enrolled teaching assistants while they take their required classes scheduled during the workday. NVUSD provides in-kind contributions and coordinates the monies for tuition, fees, books, and parking that are paid by the grant. The district also provides the salary for the program coordinator, stipends for teacher mentors, child care, and computers (B. Pahre, personal communication, Feb. 23, 2002). Additionally, Chapman College and Pacific Union College donate a substantial amount of the tuition monies as in-kind contributions as well as provide transcript analysis and academic and personal counseling.

Blended Program at Pasadena City College. Pasadena City College (PCC), an urban, two-year college with 30,000 students, and Mount St. Mary's College (MSMC), an urban, women's liberal arts college of 2,000 students, operate a preprofessional teacher preparation program. Successful completion of the program requirements enables students to move seamlessly from the two-year to the four-year institution and to complete the requirements for the associate of arts degree at PCC and for a bachelor's degree from MSMC in liberal studies with either a multiple subject credential or the education specialist credential (special education: mild/moderate disabilities) (Pasadena City College, 2002; Pasadena City College and Mount St. Mary's College, 2002).

In addition to the typical course articulation agreement, Mount St. Mary's College (1) identifies an undergraduate adviser to meet with students and PCC advisers, (2) meets with the PCC coordinator(s) at least once each year to discuss problems and solutions and changes in the program, (3) reserves space in the teacher preparation program for qualified PCC transfer students, and (4) offers support and special program planning for PCC transfer students. In turn, PCC (1) provides coordinator(s) for the yearly

meetings to discuss problems and solutions and also changes in the program; (2) prepares counselors to advise students who join the MSMC-PCC teacher preparation program; (3) publicizes the program and distributes pertinent information to all PCC students; and (4) distributes information forms and sends to MSMC the names, addresses, and expected dates of arrival of students in good standing in the program.

In addition to this blended program with Mount St. Mary's College, which has offered concurrent degree and credential programs since the Ryan Act of the 1970s, Pasadena City College has also developed similar blended program options for teacher preparation partnerships with several other regional universities.

Conclusion

California is working to regain its golden image in the education of its inhabitants. Admittedly the state has a difficult charge. California has a complex and competitive economy, constantly changing technologies and information resources, an increasingly diverse culture, and multiple ethnicities and languages. By targeting the state's community colleges as the future educational outlets for teacher preparation, the state has realized the important function that these colleges can serve. Even the new Master Plan for Education includes teacher preparation as a goal for the California Community Colleges (Joint Committee to Develop a Master Plan for Education, 2002).

The community colleges are local, accessible, and affordable. In no uncertain terms, the community colleges appeal to Californians. Situating teacher preparation at the community colleges is bringing the possibility of a teaching career to many who would not otherwise consider this professional opportunity.

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The development of the Associate of Arts in Teaching degree in Maryland represents an outcomes-based, statewide articulation of the two-year degree in elementary education to public and private four-year institutions.

A New Degree for the Community College: The Associate of Arts in Teaching

Maureen L. McDonough

In a May 3, 2001, memorandum to the Maryland Education Policy Committee, the state secretary of higher education, Karen Johnson, described an important change to the state education code, saying, in part:

> Following two years of extensive work, the Associate of Arts in Teaching (A.A.T.) degree is ready to be implemented at Maryland public community colleges. . . . The work to make the A.A.T. degree a reality required many individuals including: the Teacher Education Articulation Committee of the Maryland Intersegmental Chief Academic Officers, the Community College Presidents, Deans of Instruction, and Faculty, the Deans and Directors of Teacher Education, four-year faculty, and both two-year and four-year Chief Academic Officers. Without the work of all these various segments and personnel the A.A.T. would not be ready to implement in Maryland. The A.A.T. degree will significantly improve and ease teacher education student transfer and help meet the enormous current and future need for teacher educators in Maryland [Johnson, 2001].

With these words the role of the Maryland community colleges in teacher education was changed in a dramatic way. This chapter will examine the development of the A.A.T. degree, the role of statewide articulation efforts in developing the degree, and the current status of teacher education articulation in Maryland.

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Redesign of Teacher Education in Maryland

In 1994, a statewide task force addressed issues pertaining to teacher preparation in Maryland. The report produced by the task force included recommendations about substantive preparation in content areas, especially math and science, and clearly supported the movement toward professional development schools designed as training centers for preservice teacher education students. The report also included language with a direct bearing on the role of the community college in teacher preparation. For example, the report recommended that teacher education programs accommodate "early deciders," individuals entering either a four- or two-year institution having already made a commitment to teaching as a career.

The report also emphasized the importance of diversifying the state's teacher corps. With the community college as the entry point for many minority students in Maryland and elsewhere, this basic principle of the redesign presented a major challenge and opportunity for community college teacher education departments to step up their efforts to be true partners in the preparation of future teachers (Maryland Higher Education Commission, 1995).

The Charge

In the fall of 1999, the Maryland Chief Academic Officers Intersegmental Group appointed a Teacher Education Articulation Committee (TEAC) comprising eight teacher educators from four-year institutions and six teacher educators from community colleges. The TEAC was cochaired by one four-year university representative and one community college representative. The committee makeup was important, because the argument that the A.A.T. degree was solely a community college initiative could be readily refuted. The charge, given in a memo to the committee, had four parts:

1. To establish a coherent articulated teacher education curriculum that would identify courses to be taught at both types of institutions and to address the issue of methods courses, content and general education courses, and internship experiences. Initially the committee concentrated on courses, until it became clear that focusing on outcomes would allow institutions the flexibility to determine which courses would address the outcomes. A course-by-course statewide articulation was not considered to be feasible.
2. To align the proposed curricula with Maryland State Department of Education policies and PRAXIS I and PRAXIS II. Praxis I is an assessment of reading, writing, and mathematics skills that are considered basic for all students considering majoring in teacher education. In Maryland the successful completion of Praxis I is required for entry into teacher education programs at four-year institutions. Praxis II

measures content knowledge and general pedagogical knowledge. Praxis I and II replaced the National Teacher's Exam (NTE).

3. To address the issue of recruitment of high school students and returning adults into the teacher education curricula.
4. To address the issue of retention of students in the teacher education curricula.

In short the mission of the TEAC was to establish a plan for the seamless transfer of teacher education students who began their preservice education at a community college with the intent to transfer to a four-year institution to earn the required baccalaureate degree and state teacher certification. With such a plan in place the community colleges could then serve as a rich source of prospective teachers, who could move on to the four-year institution without losing credits or repeating courses.

Although individual two- and four-year institutions had previously crafted and implemented course-by-course articulation agreements in specific areas like early childhood education, the idea of a statewide articulation arrangement was considered provocative, even by the TEAC members in the beginning. The argument in favor of a statewide articulation was strongly supported by the community college membership, who made the case that (1) under the existing system, students beginning their preservice education at a Maryland community college needed to identify their four-year transfer institution in the very first semester lest they lose credits in transfer due to a disparity between recommended courses and the transferable courses accepted by the four-year college or university; (2) the generic statewide articulation system was not always accurate and reflected the transferability of general education courses but not of teacher preparation courses; (3) a coherent statewide transfer pattern would make a powerful recruiting tool for prospective teacher education students; and (4) especially in community colleges that had teacher education students in all areas of teacher education (early childhood, elementary, secondary, and special education), faculty and staff did not have the time to devote to creating and updating individual articulation agreements. The committee agreed at the onset to strive to achieve a workable statewide transfer agreement, focusing on elementary education transfer students in the first iteration of what would become the A.A.T. degree.

Initial Response to the Charge

Recognizing that the currency of transfer is course credits, the issues of course titling and numbering were dealt with at the beginning of the TEAC deliberations. Rather than attempting to align course-by-course patterns and to debate the name and number of appropriate foundational teacher education courses to accompany general education requirements, the committee decided to identify learning outcomes typical of the first sixty hours (the

freshman and sophomore years) of teacher preparation for elementary education majors. This shift changed the focus of the development of the associate degree away from the names and numbers of courses and toward the things a successful rising college sophomore teacher education student in elementary education should know, understand, and be able to do. The working hypothesis was that the first sixty hours would reflect the same outcomes achievement for both transfer and native teacher education students. *How* the outcomes would be met would be left to the individual institutions of higher education to determine. This approach created consistency of program content without imposing a cookie-cutter model that might threaten the autonomy of any institution. Thus the question that became the centerpiece of the development of the A.A.T. degree was, "What should the elementary education major look like, academically, as she/he enters the junior-level of teacher preparation, regardless of where she/he completed the initial two years?"

It was understood that this new approach to articulation would force two- and four-year institutions alike to review their teacher education programs to achieve agreement and consistency in the first two years of teacher education.

In searching for a logical set of outcomes on which to base the first two years of teacher preparation for elementary education majors, and ways of writing the curriculum to address these outcomes, the committee reviewed the National Council for the Accreditation of Teacher Education (NCATE) Program Standards for Elementary Teacher Preparation. This review, and the subsequent adoption of the NCATE standards as the grounding for the A.A.T. degree, proved valuable for several reasons. First, the NCATE standards are required of all approved teacher education programs in Maryland. By familiarizing the community college representatives with these nationally recognized standards, the committee had identified a common language that both two- and four-year teacher educators could and would use in the development of the foundational degree. Second, the standards were broken down into eight content areas, and for each one a writing committee reviewed national standards and created a set of outcomes pertaining to that area. Finally, the NCATE standards were broken down in such a way that those appropriate to the first two years of teacher preparation were readily identifiable and those that did not apply to the foundational preservice experience remained the responsibility of the four-year institution. This separation of standards appropriate to each type of institution helped to allay concerns on the part of some four-year teacher educators that community colleges were entering content areas, like methods and assessment, best left to the upper division years. It also reemphasized to the teacher educators from the community colleges that their mission was strictly foundational, consistent with the transfer function of two-year institutions.

Emergence of the Maryland Association of Directors of Teacher Education at Community Colleges

Although much of the response to the charge to develop a pattern of seamless transfer for teacher education majors was performed by the TEAC and subsequent curriculum writers, it is important to note that parallel to the emergence of the TEAC, the Maryland community college teacher educators organized themselves into an affinity group: the Maryland Association of Directors of Teacher Education at Community Colleges (MADTECC). The purposes of this organization were (and are) to support the work of the TEAC, to share information pertaining to teacher education in general and the role of the community college in particular, and to provide community college administrators with information about the ways teacher education in community colleges was rapidly expanding as the teacher shortage became more critical locally and nationally.

The first meeting of MADTECC took place in January 2000, attended by representatives from ten of the sixteen Maryland community colleges. The minutes of that and following meetings reflect the commonality of issues and concerns faced by the state's two-year institutions in promoting their teacher education programs as viable partners in the process of preparing the state's future teachers (McLaughlin, 2000). By the next meeting (February 2000) MADTECC membership had been extended to representatives from the Maryland State Department of Education, the Maryland Higher Education Commission, and the University System of Maryland (USM). The representatives from the first two organizations could play a politically valuable role by reinforcing the work of the TEAC and introducing the state's teacher education policymakers to the problems and promise of the community colleges' teacher education leadership. Through USM representation the four-year institutions had a voice in the proceedings.

The formulation and publication of the first MADTECC report, in June 2000, caught the attention of administrators from both two- and four-year institutions, as it provided a coherent plan of action for Maryland's community colleges to clarify and strengthen their role in teacher preparation. The report also served to inform the Maryland Chief Academic Officers Intersegmental Group that their support of their institutions' teacher education programs was vital to those institutions' continued success as full and respected participants in teacher preparation.

Work of the Outcomes Writing Committee

With financial support supplied through grants funded by the Maryland Higher Education Commission (MHEC), the Maryland State Department of Education (MSDE), and the Pew Foundation (through the University System of Maryland), the writing of the outcomes for the first sixty hours

began in earnest in June 2000. All two- and four-year colleges and universities in the state were invited to send representatives to assist with the writing. Thirty-nine faculty and administrators participated, including eighteen representatives from four-year institutions, nineteen from two-year institutions, one MHEC representative, and a representative from a local public school district.

Committee members were asked to volunteer for one of the eight content areas identified as appropriate to the curriculum for the first two years of preparation of elementary teachers. The content areas were social and psychological foundations, language arts, science, mathematics, social studies, arts, physical education, and diversity/behavioral foundations.

The outcomes included those pertaining to a candidate's ability to know and understand the content inherent in each of the eight areas; outcomes involving the application of the concepts were only minimally included. Because the first two years of teacher preparation are foundational, each candidate's ability to use or to apply the content remains the focus of the integrated methods courses offered at the junior and senior levels. Praxis II is one national standard; the student teaching (in Maryland referred to as the *internship*) assessment is another.

A model template was provided to each of the writing content subcommittees, with four columns in which to indicate the outcomes, indicators, assessment types, and assessment tasks inherent in each of the content areas. A major advantage of this model was that it fostered consistency in curriculum development across all content areas yet allowed the writers to share and include best practices assessment samples from their experiences. A sample of the model, from the work in the social and psychological foundations content area, appears in Table 4.1.

When the writing subcommittees had completed their work, smaller subcommittees met during the fall and winter of 2000–01 to refine each committee's document to achieve coherence and consistency. This work was mostly stylistic because the substance had been provided by the larger writing committee.

When this phase of the curriculum writing was completed, the USM posted the outcomes on a Web site for all institutions of higher education and state education agencies to review. Comments were invited. The few comments that were posted were reviewed by the appropriate writing subcommittee; if needed, appropriate adjustments were made. Community colleges were free to apply to the MHEC to offer the A.A.T. degree, provided that their respective teacher education faculty and college administrators were confident that the college's teacher education curriculum met the desired outcomes or that in those areas where this was not the case the curriculum could and would soon be adapted to meet all the outcomes. Outcomes-based approaches are not new, but creating a degree around a set of outcomes and then adapting course curricula around them is creative. In the case of the arts, for example, the National Standards for Arts

Table 4.1. Standard 3b (*Social and Psychological Foundations*). Adaptation to diverse students—Candidates understand how elementary students differ in their development and approaches to learning, and create instructional opportunities that are adapted to diverse students.

Outcomes	*Indicators*	*Assessment Types*	*Assessment Tasks*
Teacher candidates will specify how issues such as justice, social equality, concentrations of power, class differences, race & ethnic relations, language & literacy, or family and community organization relate to teaching & schools.	a. Define justice, equality, etc. b. Explain how class differences, race, and language impact learning. c. Describe accommodations teachers may make for differences in language and culture.	• Analysis of case studies • Discussion • Role playing • Debates • Interviews • Letters to the editor from a theorist	• Interview of community member about her/his educational experiences

Source: Basili, 2000.

Education guidelines indicate that teacher education candidates must be able to communicate at a basic level in all four arts disciplines—dance, music, theater, and the visual arts. Clearly, adding four courses in the humanities to the A.A.T. degree would not be feasible, so the TEAC recommended that a model integrated arts course be developed and adopted by the community colleges electing to offer the A.A.T. degree and by the four-year institutions as well. This was done in fall 2001, and several two-year institutions have already created the course and have added it to their first two years of elementary teacher preparation.

Response to the A.A.T. Degree

By spring 2002, eight community colleges in Maryland had been granted permission by the MHEC to offer the A.A.T. degree. The response to this new degree has implications both at the individual institutional level and at the statewide teacher education community level.

At the institutional level it is apparent that the development of the A.A.T. degree and the changes deemed necessary to create consistency at the four-year institutions necessitated involvement of arts and sciences faculty. It is impossible within the scope of this chapter to analyze the responses by each and every arts and sciences faculty that assisted in the writing, reviewing, and implementing of the degree and its transfer implications. However, at both TEAC and MADTECC meetings, members heard anecdotal evidence of positive collaboration between and among teacher education faculty and arts and sciences faculty. Curriculum has been revised

and continues to be revised at both two- and four-year institutions so that each outcome in the degree can be satisfied, and in some cases by more than one course. Each of the community college A.A.T. degrees is unique, and the range of credits in what was originally hoped to be a sixty-hour degree is between sixty-two and sixty-nine. Administrators of teacher education programs at several four-year institutions have indicated that they have made revisions to their programs to allow the seamless transition that remains the goal of the initiative. Whether this effort is consistent among all four-year colleges and universities remains to be seen. The first A.A.T. graduates completed the degree in December 2002; their progress, as well as that of subsequent A.A.T. degree holders, will be closely monitored by teacher educators from both the two- and four-year institutions to determine the viability of the degree as a true reflection of the first two years of teacher preparation at baccalaureate institutions.

At the state level, MSDE and MHEC will also be watching the progress of the A.A.T. degree to see how many students take advantage of the degree and are successful in achieving a smooth transfer. A subcommittee of the original TEAC was formed in fall 2001 to review assessment procedures for the A.A.T degree. Several state-level organizations had representatives on that committee, which concluded that quality control for the A.A.T. degree was inherent in the degree requirements of a 2.75 GPA, passage of PRAXIS I, and the portfolio that accompanies each A.A.T. student as she or he transfers from the two- to the four-year institution. It is safe to say that the first cohorts of A.A.T. graduates will be closely followed as they transfer, as they sit for the PRAXIS II exams, and as they enter the teaching profession.

Next Iterations

The 2001–02 work of the TEAC focused on curriculum for the A.A.T. degree for secondary-level teacher candidates. Using the same outcomes-based model, arts and sciences faculty were recruited and wrote curriculum for mathematics, science, Spanish, and physical education. Technical education, business education, family and consumer sciences, English, and social sciences curricula were written in spring and summer 2002. Because secondary-level teacher candidates must have a content major, the involvement of arts and sciences faculty is arguably more critical for this iteration. To date, the Web-posted outcomes have received considerably more attention and responses from arts and sciences faculty than the elementary education outcomes did. Some of the concerns have to do with the outcomes-based language, which appears to be unfamiliar to some content specialists. It will be the responsibility of the TEAC to assure arts and sciences faculty that the language of outcomes translates into courses and that if the A.A.T. degree for elementary teacher education serves as an example, the curriculum in selected courses will become stronger to accommodate the standards-based outcomes. It is a delicate balancing act to prepare, for example, a math major who is also

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a secondary math teaching major. There should be no zero-sum option here; quality of content preparation must go hand in hand with quality of teacher preparation.

Selected community colleges in Maryland were expected to begin to apply for the A.A.T. degree for secondary education students in 2002. Obviously those that have made a successful application for the A.A.T. degree in elementary education are familiar with application protocols and will probably be among the first to submit for permission to grant the secondary iteration. An A.A.T. degree in special education and one in early childhood education are slated to follow; the outcomes-based model will be applied to those as well.

Conclusion

Maryland community colleges and their four-year counterparts were granted a unique opportunity to make a significant difference in the transfer process for teacher education students in an era of critical teacher shortage. If the A.A.T. degree serves its holders well in their transfer and professional development, the initiative will be judged a success. If the pipeline can be expanded so that community colleges recruit, retain, and transfer more teacher education students in all areas of teacher preparation, those who supported or contributed to the initiative can proudly claim that they responded creatively to a challenge at a time when such a response was badly needed. In short, if the A.A.T. degree works in all iterations, it will serve as a possible national model for teacher preparation and as a testimony to the valuable goal that a collaboration among community colleges, four-year institutions, and state agencies can achieve.

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5

This chapter focuses on the activities and outcomes of the Teacher Education Partnership Commission in Arizona and the efforts of the newly formed National Association of Community College Teacher Education Programs.

High Schools, Community Colleges, and Universities: Partners in Teacher Education and National Efforts

Fred Gaskin, Steven R. Helfgot, Sue Parsons, and Anna Solley

National education organizations and leaders are recognizing that the entire teaching profession needs to be elevated in order to recruit and retain career teachers. U.S. Secretary of Education Roderick Paige has challenged two-year colleges to expand programs in teacher education and develop partnerships to help train math and science teachers (Evelyn, 2001). George Boggs, president of the American Association of Community Colleges, has also encouraged community colleges to focus on a student-centered teaching and learning paradigm. In a presentation to the National Association of Community College Teacher Education Programs, he stated, "Community colleges must help to meet the challenge to recruit and educate the next generation of elementary and secondary school teachers" (Boggs, 2001, p. 4).

Although national education organizations and leaders are taking some positive steps toward improving the quality of America's teachers, community colleges in individual states are also assuming a leadership role in teacher education.

The authors thank Kate Dillon-Hogan, director of transfer and articulation at the Maricopa Community Colleges, and Cheri St. Arnauld, national director of teacher education programs at the Maricopa Community Colleges, for their contributions to this chapter.

This chapter discusses the role and accomplishments of the Teacher Education Partnership Commission (TEPC) in Arizona and describes community college teacher education programs in Arizona. In addition, the chapter discusses the efforts of the National Association of Community College Teacher Education Programs (NACCTEP), developed in partnership with Cerritos College in Norwalk, California; the League for Innovation in the Community College; and the American Association of Community Colleges.

Teacher Education Partnership Commission

Nearly one-half of Arizona's teachers will be eligible to retire during the next ten years, and many new teachers will be needed to offset projected growth in the student population and class size reductions. The state faces an acute teacher shortage that is estimated to reach 27,000 during this decade.

Teacher attrition is high in Arizona; it is similar to the national trend in which one out of every three beginning teachers leaves the profession within five years. In addition, the average salary of teachers in Arizona is below the national average (American Federation of Teachers, 2002), as is the high school graduation rate and the college-going rate of high school students (Greene, 2001). In fact Arizona ranks fiftieth in the latter two statistics. Currently, many school districts in Arizona are hiring underprepared teachers with emergency certificates to offset the teacher shortage.

Faced with these startling statistics the chancellor of the Maricopa Community Colleges established the TEPC to address PK–12 teacher recruitment, preparation, and retention issues. The goals of the commission include (1) designing a proactive plan to increase the number of students entering the teaching profession; (2) increasing the number of qualified teachers available to fill positions in Arizona, particularly in areas of critical need; (3) enhancing the professional development of teachers; (4) planning, supporting, and offering rewards that result in greater retention of quality teachers; (5) implementing activities that improve the professional image of teaching and the self-image of teachers; and (6) developing policy strategies.

The commission developed strategies to accomplish these goals by sponsoring forums that discussed issues, trends, and strategies; designing flexible partnership programs and support services for education majors; discovering and promoting best practices in teacher preparation; identifying resources and seeking opportunities for funding; and creating a National Center for Teacher Education, which is housed at the Maricopa Community Colleges. In addition, the commission developed a strategic plan that addresses strategies for communication, program development, and policy changes. Several presentations by the cochairs and the director of the National Center for Teacher Education have communicated the mission of the TEPC to numerous groups of stakeholders.

The TEPC began meeting in October 2000 and was initially made up of forty education, business, government, and community leaders from Maricopa County, including the deans of the Colleges of Education from all private and public universities in the State of Arizona and faculty and administrators from the Maricopa Community Colleges. The TEPC is cochaired by the vice chancellor for academic affairs of the Maricopa Community College District and the superintendent of the Liberty School District, in West Maricopa County.

Providing Statewide Leadership. In November 2001, the chancellor presented background information about the teacher shortage and the mission and goals of the commission to the Arizona Board of Regents and the State Board of Directors for Community Colleges of Arizona at their joint meeting. The two boards asked that the TEPC provide statewide leadership for addressing teacher preparation issues. Consequently the membership of the TEPC was broadened to include a full representation of community college partners from around the state.

The TEPC is providing statewide leadership for the development of a statewide associate degree in teacher education. Given the requirement of the federal No Child Left Behind Act that classroom paraprofessionals, or teacher aides, possess at least two years of higher education, the commission recognizes the importance of offering the appropriate combination of coursework, skills, and practicum experiences to prepare paraprofessionals, and at the same time providing a career and education ladder so they may transfer into the preservice teacher preparation programs without loss of credit earned.

The existing statewide transfer model has provided pathways for students who want to begin a preservice program at a community college and then transfer to a four-year institution to complete a baccalaureate degree in elementary education, special education, or secondary education. However, the pathways provided only a limited opportunity for practical experience and the development of skills needed for success as paraprofessionals. To create a career ladder leading from paraprofessional training and education to preservice education to the completion of the baccalaureate and receipt of a teaching certificate in a seamless and fully articulated process, it is considered imperative to engage community college and university faculty in an effort to improve the existing pathways. Therefore, in January 2002, the public university and community college presidents held a summit to discuss the concept of an associate degree in teacher education that would provide a pathway from the community colleges to the universities for students who wish to pursue a teaching career in elementary education, special education, or secondary education. The presidents decided that Arizona would build on the work of the Maryland Higher Education Commission, which approved six community colleges to offer an associate degree in teacher education in 2001. Maryland's program provides the first two years of the baccalaureate program required for state certification. It is

a standards-based degree and provides coursework beyond the general education requirements (see Chapter Four).

Statewide Associate Degree in Teacher Education. A workgroup has been charged to develop an associate degree in teacher education that builds on the conceptual framework that is part of the current statewide transfer model, and that strengthens the existing pathways and lower-division preparation for paraprofessionals and preservice students. The associate degree in teacher education will be a coherent block of courses that includes general education courses as well as several lower-division courses in pedagogy. The anticipated initial date for offering the degree is fall 2003.

The TEPC proposes that this associate degree in teacher education be developed collaboratively by faculty representatives from the community colleges and the universities; K–12 teachers, administrators, and superintendents; and community partners. Appropriate reviews and discussions by teacher education articulation task force members, academic program articulation committee members, the two state boards, and the TEPC are planned.

Early reports from the workgroup indicate that the Arizona effort to create a statewide associate degree for teacher preparation is well on track. Content courses to be included in the proposed associate degree will meet the Arizona Academic Standards for elementary education. Education courses will go beyond foundations in order to provide early classroom experience and exposure for students. Additionally, coursework will meet the needs of the paraprofessional as well as the preservice teacher by including, for example, material related to classroom management and organization, special education, and bilingual education, along with the content courses in reading, math, and science.

Influencing State Policies. Current policies that affect educational decisions and procedures are being reviewed through policy institutes, which will recommend changes. TEPC members recently participated in a policy institute and a retreat to consider a P–16 model that has been developed by the Education Commission of the States.

During the past decade the Education Commission of the States has found that several states have begun to move away from dealing with issues (including the teacher shortage) on a piecemeal basis in favor of a more comprehensive approach. A growing number of educators and policymakers are beginning to see the benefits of looking at education as one P–16 system rather than as several separate systems ("'P-16': The Next Great Education Reform," 2002). The term *P–16* reflects a central vision of a coherent, flexible continuum of public education that stretches from preschool to grade 16, culminating in the baccalaureate degree. TEPC is playing an active role in the development of a P–16 structure in Arizona by providing key leadership for teacher education.

Ongoing Program Development. Each Maricopa community college has a teacher education program that addresses the immediate needs of the

K–12 districts surrounding the college. In addition, Maricopa Community Colleges hired a national director of teacher education programs and six new education faculty members during 2000–01. The national director provides leadership for the National Center for Teacher Education within the Maricopa Community Colleges and supports the TEPC and other Maricopa initiatives as well as the NACCTEP.

Teacher Education at the Maricopa Community Colleges

In response to the teacher shortage the Maricopa Community Colleges have developed flexible and innovative teacher education programs. They include 2+2+2 partnerships with local school districts and universities, postbaccalaureate certification and endorsement courses and programs, grow-our-own programs, and faculty development opportunities for current teachers.

2+2+2 Partnerships with Local School Districts and Universities. Several of the colleges offer teacher education programs that provide support for students as they transition from high school to community college to the university setting. Estrella Mountain Community College offers the inspire.teach program, a 2+2+2 program that supports and encourages teaching as a profession. The program seeks to increase the number of diverse professionals within Arizona's teaching force and reflects a commitment among secondary education, community college, university, and community partners to inspire students from underrepresented groups to explore, pursue, and excel in teaching careers. Through a network of experiences and support services (for example, counseling sessions, field trips, internships, scholarships, and workshops), students have the opportunity to explore and evaluate the benefits and challenges of the teaching profession. Students must apply to be admitted to the program and are guaranteed admission to the College of Education at Arizona State University West (ASU West).

Glendale Community College (GCC) is participating in the AzTEC consortium to prepare students for careers in teaching. The AzTEC 2+2+2 program started in fall 2000 and is a partnership program with ASU West and Glendale Union High School District. High school students take classes preparing them for teacher education programs at GCC and ASU West. The mission is to recruit quality students into teacher education through early outreach, with education coursework, student orientations, parent-student outreach meetings, recruitment targeted at high school juniors and seniors, partnerships with local elementary school districts to support the transition of instructional aides through the teacher education process, seamless transfer for Glendale students to ASU West, and promotion of the grow-our-own-teacher concept at local high schools by supporting and mentoring high school students who are taking dual enrollment or concurrent enrollment classes.

Paradise Valley Community College offers Teacher Connection, in partnership with Paradise Valley Unified School District (PVUSD) and ASU West. Teacher Connection is a 2+2+2 program designed to identify students who have a strong interest in education as early as their sophomore year in high school. The students receive academic counseling and participate in special activities to reinforce skills needed by teachers. PVUSD will provide student teaching experiences. If students complete their education and student teaching experience, PVUSD will guarantee them a teaching position.

The Dynamic Learning Program serves as the core of teacher education offerings at South Mountain Community College and has been an articulated 2+2+2 model for the past five years. During the educational component at South Mountain, students in the program interact with Arizona State University Main (ASU Main) faculty and staff and participate in internship activities at other partner schools. The program is based on a cohort model, and students move through the prescribed curriculum as a group. There are two full-time cohorts during the day, one serving first-year students and one serving second-year students. In addition, there is an afternoon cohort consisting of paraprofessional employees from area schools who are studying to become teachers. Instruction involves a collaborative and integrative approach, with multiple faculty teaching multiple courses. There is an interdisciplinary approach to instruction, with an applied focus and heavy emphasis on computer and Internet technologies. Students work in groups, and support services are provided by the partner institutions. The South Mountain Title V project is supporting the full integration of the mathematics and science courses required of teacher education majors. The first block of twenty-five students graduated from ASU Main this year.

Phoenix College and South Mountain Community College have been involved in developing and supporting a charter high school for teacher education that will open in fall 2003. The curriculum will be targeted to students interested in becoming K–12 teachers. This will strengthen the existing 2+2+2 model and engage students in early classroom experiences.

Postbaccalaureate Certification and Endorsement Courses and Programs. Rio Salado College offers an on-line postbaccalaureate teacher preparation program. This program is designed for working adults who have already received an undergraduate degree and wish to enter the teaching profession. Students begin with an education seminar followed by additional on-line coursework, meetings with master teachers, and placement for student teaching in school districts in the region. The On-line Elementary (forty-five credits), Secondary (thirty-three credits), and Special Education (forty-eight credits) Teacher Certification Programs incorporate coursework, practicums, and student teaching as required by the state of Arizona. Classes begin every two weeks for easy scheduling and may be completed in thirteen weeks or in as few as six weeks with instructor approval. This program emphasizes the current teacher preparation standards and has been approved by the Arizona State Board of Education.

Scottsdale Community College (SCC) offers a postbaccalaureate program at the college site and in the Scottsdale public schools. The program targets students who hold a bachelor's degree in another field and would like to make a career change to teaching. The program is a field-based immersion program and leads to certification in elementary education. This fast-track program uses a cohort group and started in the summer of 2002.

Grow-Our-Own Programs. The Pecos campus of Chandler-Gilbert Community College recently developed a new teacher preparation program in collaboration with the local school district and Arizona State University East (ASU East). The program is designed for current employees (for example, teacher aides, office workers, cafeteria workers, parents who help in the classroom, and bus drivers) who are not certified teachers. The local school district, as part of its *grow-our-own* philosophy, recruits and supports the employees as they participate in the program and supplies adjunct faculty for the program. Chandler-Gilbert provides program coordination and support services and offers education courses either at the college or on site at the school district. ASU East provides a part-time program coordinator on site, offers support services, works with the school district to identify master teachers as adjunct faculty, coordinates internships and student teaching experiences, and tracks the program graduates. The school district plans to hire most of the graduates.

Phoenix College is coordinating the Urban Teacher Corps, a grow-our-own program that was incubated by the Phoenix Think Tank ten years ago in partnership with ASU Main. There are currently nine partner K–12 school districts in urban Phoenix that support instructional assistants and other classroom aides in pursuing a teaching degree with a bilingual or an urban emphasis. Once teacher certification is accomplished, candidates have priority in securing a permanent teaching position in their school districts.

The Maricopa Early Childhood Education Consortium of Colleges (MECECC) has worked to ensure that comprehensive programs in early childhood education are available at each college for Maricopa students and child-care employees and has strengthened its supportive relationships with providers and other members of the early childhood community in Maricopa County. This consortium of ten community colleges provides a comprehensive and collaborative approach to early childhood education at all levels including the child development associate degree, the certificate in early childhood education, and the associate in applied science degree. The consortium coordinates educational and training needs with community providers to ensure that students and employees continue to grow and develop as professionals.

In-Service Faculty Development Opportunities for Current Teachers. Several community colleges in the Maricopa system offer in-service faculty development opportunities to current teachers that are designed to enhance the teaching and learning process. Estrella Mountain Community College offers training in computing and Cisco networking to current teachers. GateWay Community College offers a certificate program

known as Education Technology, which is designed for teachers who wish to increase their knowledge in computer literacy. Mesa Community College in partnership with the Mesa Public Schools (MPS) offers the English as a Second Language (ESL) Endorsement Program. This cohort program, established with the district, provides Mesa Public Schools' teachers with opportunities to take all their necessary coursework for ESL endorsement at school sites within the Mesa Public School District. Rio Salado College offers unique courses for classroom teachers working toward specific endorsements or professional advancement. These courses are created for teachers by teachers and are offered in a distance-learning Internet format, are based on current national education and technology standards, are accepted by the Arizona Department of Education and by most districts for salary increases, lead to approved endorsements, provide opportunities for sharing ideas in an on-line teacher chat room, and are cost effective.

The Office of Public School Programs (OPSP), housed at the Maricopa Community College District Office, has established a reputation for high-quality professional development for K–12 teachers in mathematics, science, and technology education. The OPSP fosters collegial learning across institutional boundaries among universities, Maricopa Community Colleges, and K–12 faculties, increasing individual and institutional capacity to support student learning. The office has pioneered the use of new curriculum materials for teachers, created new professional development programs for teachers, and developed a strong professional network for teachers in collaboration with national professional organizations, universities, colleges, and school districts. The OPSP is implementing a five-year project to collaborate with seven public school districts and two Bureau of Indian Affairs agencies in the Gila River and White River Indian communities, in Pinal County and Nogales, Arizona.

The AlliancePlus Technology Project, offered through the Phoenix Think Tank, is a nontraditional course on infusing technology into existing curriculum, using the Savvy Cyber Teacher™ training materials developed by the Stevens Institute of Technology. This train-the-trainer program uses think tank core trainers to train and certify K–12 teachers and higher education faculty. The course offers two hours of ASU graduate credit; an ESL complement adds an additional one hour of credit. The course is delivered at the K–12 level for in-service training and at the college and university level for preparation of preservice teachers and K–12 teacher training. Think tank members as well as private and public foundations have provided financial support for programs, projects, and initiatives.

National Association of Community College Teacher Education Programs

Community colleges often respond to emerging social needs by taking on a new role before the larger society is aware of the need or of the work that is already being accomplished by community colleges. This was especially true

for the initiative to increase and improve teacher education, which has traditionally resided in four-year institutions. Community colleges were in the position of having to assert their role with legislators, policymakers, and funding agencies. Furthermore, community colleges that were interested in developing and building teacher education programs were left wondering where they could find colleagues engaged in similar work as well as support and expertise.

In fall 2000, representatives of the Cerritos College model teacher-training program known as Teacher-TRAC met with representatives of the Maricopa Community Colleges teacher preparation programs to explore the development of a national association for community colleges involved in teacher education. To expand the idea to other colleges, the League for Innovation hosted the Teacher Preparation Summit at its annual Innovations Conference in spring 2001. At this conference, teacher preparation models were presented, and input for the national association was solicited. In September of 2001, a first organizational meeting was held in Chicago, cohosted by the Maricopa Community Colleges and Cerritos College. The meeting drew forty-one participants from over twenty community colleges in seventeen states. A number of those present, and the colleges they represent, have joined the collaboration and are now active participants in the ongoing development of NACCTEP. The organization will be officially launched at a spring 2003 conference that will highlight programs and services to enhance the role and effectiveness of community college teacher education programs, including professional development for teachers.

Mission and Goals. The creators of the NACCTEP drew from a 1998 National Science Foundation publication, *Investing in Tomorrow's Teachers: The Integral Role of Two-Year Colleges in the Science and Mathematics Preparation of Prospective Teachers,* to build a network of professions "to promote the community college role in the recruitment, preparation, retention, and renewal of diverse Pre K–12 teachers and to advance quality teacher education programs in the community college" (NACCTEP, 2003). Within that mission, NACCTEP has developed specific goals, such as advocating for and representing at the national level the interests of community colleges in teacher preparation; promoting programs, services, and activities to enhance the role and effectiveness of community college teacher education programs, including professional development for preservice and in-service PK–12 teachers and community college teacher educators; establishing connections among community college professionals and others interested in teacher education; and providing resources for models of teacher education programs for community colleges involved in teacher preparation. NACCTEP anticipates undertaking such activities to express its mission and goals as speaking to legislators and policymakers about support for community college teacher education programs, serving as a clearinghouse for programs and practices, and holding an annual conference on teacher preparation in the community college.

Working with Partners. Community colleges are expert in developing partnerships essential to furthering their goals. For example, community colleges have cultivated partnerships with business and industry to help prepare students for the workforce. Similarly, partnerships with four-year colleges and universities are essential as community colleges pursue their mission of preparing students for transfer to these institutions where they can complete their undergraduate degree programs. Also, community colleges regularly establish partnerships between and among themselves and with organizations that represent community colleges to pursue common interests. NACCTEP has begun as a collaborative effort and will be expanding its partnerships in all of these areas over time. Membership will include community colleges with teacher education programs and the staff who work in those programs, and university partners, corporate partners, teacher education students, and professional associations with an interest in teacher education will have the opportunity to affiliate with the association.

As NACCTEP continues to unfold, expanded partnerships are a significant priority. Alliances with colleges of education in the states with community college teacher education programs are essential. Relationships with the organizations that count those colleges of education as their members are of equal importance. Teachers' organizations and organizations of school districts (which are, after all, the employers of teachers) are an important focus. Obvious partners include those who produce educational materials and the many items that support teacher education and teachers themselves. Even more important are the partnerships with those in the business world who have no business interest per se in teacher preparation but who do have a profound interest in the development of an educated populace and a well-trained workforce. These corporate leaders across the country who understand the importance of quality teachers to workforce and economic viability are natural corporate partners for NACCTEP.

Conclusion

As flexible and responsive institutions, community colleges are prepared to address the issues concerning the teacher shortage and willingly assume leadership for teacher education. The Maricopa Community Colleges, Cerritos College, and other community colleges exemplify the growing and increasingly important role of community colleges in the training of the next generation of PK–12 teachers. They are responding to the teacher shortage by developing new and innovative programs in partnership with school districts, universities, and the local community. In addition, they recognize the need for a clear and strong voice to articulate educational and policy issues on a national level. NACCTEP is positioned to be that voice, and like teacher education in the community college, NACCTEP will serve as a national leader for teacher education.

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This chapter describes the efforts of St. Petersburg College (formerly St. Petersburg Junior College) to offer teacher education baccalaureate degrees in elementary education, in special education, and in secondary education in math and science.

The Role of Community Colleges in Offering Baccalaureates in Teacher Education: An Emerging Possibility

Thomas E. Furlong Jr.

Florida schools continue to face a shortage of teachers. The state's school districts will need to hire between 15,500 and 19,000 teachers by the year 2020, which represents a 27 percent increase over the number of teachers that the state has today. This number is especially daunting because Florida's colleges of education produce only about 6,300 graduates a year, and most of these new teachers major in elementary education rather than in the critical shortage areas of secondary mathematics, secondary science, or special education (Barnett, 2002).

The Florida legislature has been looking at a number of options to increase the number of teacher education baccalaureate degrees granted in the state. For example, in 1996, the Florida legislature passed a bill, referred to as "time to degree" legislation, that directed the twenty-eight community colleges and eleven public universities in Florida to adopt a set of standard prerequisite lower-division courses that would transfer successfully as part of the 120 hours required for a teacher education baccalaureate degree. The three lower-division courses identified for all community colleges were Introduction to Education, Instructional Technology, and Diversity. These courses were adopted statewide, which played a significant role in improving the transfer of students from the lower division into the upper division of state universities with no loss of credit.

In 2001, legislation was enacted to expand baccalaureate production by permitting community colleges to seek accreditation by the regional association to offer four-year degree programs in certain niche markets (see

Florida Statutes, 2001, 240.3836). St. Petersburg College (SPC) in Pinellas County, Florida, has a long history of providing preservice and in-service teacher education as well as a successful 2+2 transfer program, and in this legislation SPC was specifically identified as a pilot college to develop a bachelor's degree in teacher education (as well as bachelor's degrees in technology management and nursing). This chapter will follow the efforts of St. Petersburg College to offer teacher education baccalaureate degrees in elementary education, special education, and secondary education in math and science.

Legislation to Expand Baccalaureate Education

Florida ranks in the bottom five states in terms of producing baccalaureate degrees, with only 22.3 percent of the population age twenty-five or older holding a bachelor's degree or higher in the year 2000 (U.S. Bureau of the Census, 2001), and the issue of improving baccalaureate access has received considerable attention in recent legislative sessions. The 2001 legislation permitting community colleges to offer baccalaureate degrees in niche markets provides "two avenues for a community college to deliver a limited number of specified baccalaureate degree programs: (1) through a 'formal agreement with the state university in its service areas for the community college to deliver specified baccalaureate degree programs'; and, (2) through a community college delivering specified baccalaureate degree programs in its district" (Horne, 2002, p. 1).

To receive approval to deliver these programs, community colleges are required by the legislation to offer three types of information in their proposals, demonstrating that (1) demand for the baccalaureate program is identified by the workforce development board, local businesses and industry, local chambers of commerce, and potential students; (2) the unmet need for graduates of the proposed degree program is substantiated; and (3) the community college has the facilities and the academic resources to deliver the program (Horne, 2002, pp. 1–2). As part of the oversight process, the state Council for Education Policy Research and Improvement reviews the proposals and provides recommendations to the Florida Board of Education, which has the final approval authority.

Since the legislation went into effect in July 2001, St. Petersburg College has been working with the Southern Association of Colleges and Schools (SACS) and specialized accrediting groups like the National Council for Accreditation of Teacher Education (NCATE) to develop a teacher education baccalaureate program. SPC has become a four-year, degree-granting institution and was accredited at that level by the SACS Commission on Colleges in December 2001. It maintains its open-access policy at the freshman year, it continues to provide instruction to those students who need a second chance to acquire precollege skills, and it still has a student body largely enrolled in associate of arts, associate of science,

associate of applied sciences, and certificate programs. The four baccalaureate programs for teacher education majors began in August 2002. The Carnegie Foundation for the Advancement of Teaching, long recognized for its classification of institutions of higher education, has recently recognized in its new classification system that a number of strictly two-year colleges have established four-year degrees. The new classification system includes three categories of baccalaureate degree-granting institutions, one of which offers both baccalaureate and associate degrees (The Carnegie Foundation for the Advancement of Teaching, 2000).

Four-Year Teacher Education Programs at SPC

The teacher education degrees that the local school districts had specifically asked St. Petersburg College to offer were bachelor of science degrees in secondary mathematics education, secondary science education, elementary education, and special education. Developing the teacher education program at the baccalaureate level was difficult for the college because, in addition to achieving regional accreditation for the college, SPC also needed to have program approval from the Florida Department of Education so that program graduates would be certified to teach in any of the sixty-seven counties in the state. In addition, SPC had agreed with its state university system partners to seek the highest level of accreditation available for any of the four-year programs it offers, and therefore the college also planned to seek accreditation by the National Council for Accreditation of Teacher Education. Accreditation requirements affect staffing when they cause the college to hire more faculty and administrators and when they indicate the approach that is taken to get a program started.

In June 2001, the college was fortunate to secure the services of Sally Naylor from the University of Dubuque, in Iowa, as the first dean of the College of Education at St. Petersburg College. The College of Education is a new organizational entity at SPC, and it will also house related majors added in the future. Naylor, the SPC faculty members who had already been working with the teacher education classes offered in the A.A. degree program, and consultants who were brought in to develop the bachelor's degree curriculum for the August 2002 deadline worked during 2001–02 to develop over seventy courses. They subsequently took the courses through the college curriculum committee, securing the resources from the college to employ six full-time faculty members, and working with the three local school districts and with the Colleges of Education around the state to put together a program that would be responsive to the state's need for additional teachers. In addition, faculty and administrators developing the new program addressed issues of curriculum quality and responsiveness to the school districts being served.

Location. SPC chose to place the College of Education at its Tarpon Springs Campus, in the northern part of the county, partly because it would

be serving the additional counties of Pasco and Hernando, which are north of SPC's county. Also, this location establishes a clear geographical difference between SPC's program and the program of the University of South Florida at St. Petersburg, whose courses are largely offered in mid- and south county locations. Although the two institutions serve somewhat different areas of the county, there are many opportunities for collaboration. The university already has an elementary education program that is offered at the Clearwater campus of St. Petersburg College, as does St. Leo's College, a private institution in Florida, and SPC will work closely with these institutions as it builds its own program. In addition, the University Partnership Center is the SPC entity that hosts fourteen colleges and universities that offer baccalaureate and graduate degrees to area residents at SPC campus locations. Indeed, for the fall of 2002, the college saw 700 students enrolled in teacher education at SPC, either through the thirty-four colleges represented in the University Partnership Center or in the newly approved programs.

Facilities. One of the first issues to be addressed was the provision of a quality facility for the new College of Education (COE). SPC was fortunately in the process of moving the library at its Tarpon Springs Campus into a new library and museum building that had just been completed. The decision was made early to renovate the former library location into a COE building. That process was supported and funded by the legislature, and the construction was completed. The programs moved into this new COE building in July 2002. As a result, when students arrived, they took classes in a completely renovated building with the latest technology to fully support the learning process. In addition, state policy specifies that when an institution receives renovation monies from the state for a building (such as the former library), it receives planning and equipment money for that building as well. So SPC not only has the renovated facility but also state-of-the-art equipment that has been designed and selected by the new COE dean and by the faculty members and school districts working with her.

Student Services. The legislature provided $1 million for a planning year to put together the infrastructure needed to offer programs of a high quality. SPC chose to employ personnel and assign them to the current financial aid, counseling, and registrar's offices and to the library as additional resources to support the four-year programs. These new employees can cross-train the other employees in those various offices. As an example, the financial aid staff at all the branches of the college will be trained by that lead financial aid counselor so that staff members will be able to answer questions from SPC's two-year students anywhere throughout the college. Also, the existing support systems on all SPC campuses for associate degree students are now available to students who stay in the county to complete baccalaureate degrees at SPC or through the University Partnerships Center.

Transfer in and out of SPC is made easier by the common prerequisite courses in teacher education, mentioned earlier, and by the use of a common

course numbering system in Florida public colleges and universities. With this system, any courses taken at a public university can transfer back to SPC's new four-year programs and students in SPC's four-year programs who need to relocate can transfer credits to Florida's other public universities.

Delivery Methods and Student Travel Concerns. Pinellas County is one of the largest and most densely populated counties in Florida and one of the lowest baccalaureate-producing counties in Florida. The county is a peninsula with difficult driving distances, which will be compounded when the major interstate in the Tampa area is renovated during the next few years. A significant assignment for the new dean and faculty of the COE has been to develop institutional approaches that address the needs of the other counties in SPC's enlarged service area. The college is attempting to address distance concerns in all three of its new baccalaureate programs by establishing cohorts at remote locations that will employ a combination of two-way video and on-line offerings, and when the student numbers are sufficient, by asking faculty members to travel to remote locations. Over time the college anticipates full program offerings in both Pasco and Hernando counties in cooperation with its partner, Pasco-Hernando Community College, and also full program offerings in the southern part of Pinellas County at other SPC campuses.

Funding the Teacher Education Programs. Considering SPC and the other former community colleges as primarily teaching institutions, the 2002–03 legislature funded SPC at the state university lower-division level, minus the dollars that are in the universities' budgets for research. Thus SPC will be supported at an enriched level for its associate degree programs but at a level that is lower than the state universities' for its teacher education baccalaureate programs. The enabling legislation also stipulated that student fees were to be lower than the fees of the Florida state universities but more than the SPC fee for its associate degree programs. The local board of trustees chose a figure that is approximately 20 percent less than that charged per credit hour by the local state university. Thus students who start at the community college and decide to pursue their baccalaureate program at SPC will have advantages in terms of geographical access, support systems, family ties, work schedules, and tuition and fees.

Financial Aid and Special Funding for Students. The college is eligible for the need-based financial aid programs in Florida, as well as for Florida's merit programs. In addition, such special programs as the University of Florida community college transfer scholarship program for minority students entering teaching will also be available to SPC students. These programs ensure that associate degree students can stay at the college, take advantage of these additional financial aid opportunities, and complete their baccalaureate degrees. SPC counselors and financial aid advisers will ensure that all students are aware of these opportunities.

Because of the teacher shortage, local superintendents have supported the creation of the new programs at SPC. In addition, they have discussed

with SPC college officials the possibility of guaranteeing teaching jobs to SPC students if they successfully complete their programs. The school districts have also proposed scholarships for students while they are in the program. It is SPC's hope that at some point students in this program who are willing to accept local employment will receive both a job offer and financial aid from the school districts.

Marketing the Programs. The enrollment management office seeks to make SPC's 49,000-member student body aware of the opportunities in the new majors in the teacher education programs. Also, SPC has worked closely with the school districts and their teacher aides, in addition to using the traditional marketing avenues of television, radio, billboards, and newspaper ads, to get the word out that St. Petersburg College offers accredited baccalaureate degrees. The college is hopeful that its marketing efforts will result in first-year enrollment of around 300 students in the teacher education programs.

A graduating class of 300 new teachers from SPC each year will have an impact on the local counties' teacher shortage. The number of graduates is projected to increase as SPC pursues cooperative efforts with local university branch campuses and other partnerships. These various efforts taken together should have a significant impact on the teacher shortage in SPC's area, and the combined model has potential impact statewide.

Curricular Concerns. A common course numbering system and a requirement that lower-division students with teacher education majors in all twenty-eight community colleges and eleven state universities complete thirty-six hours in general education before moving to upper-division work have facilitated articulation in the state of Florida. When students have not met lower-division requirements, SPC is able to offer them the needed courses through its own lower-division programs.

SPC is in the process of developing student internships and clinical experiences as additional curricular features of the teacher education curriculum. Working with local public school district superintendents, staff members, and teachers allows the college to identify the things that would be helpful to these schools and that they would like to see in a COE curriculum. Local school districts have expressed particular interest in providing opportunities for education students to be in the classrooms for many more hours than simply the hours of the final internship. The SPC program also provides clinical opportunities throughout the curriculum in addition to the final internship.

Another instructional component of particular interest in the plans for the new college is the *learning community* approach. SPC is attempting to put together learning communities of about twenty to twenty-five students who register together, take the same schedule of classes, receive counseling as a group, and share the peer relationships that such communities provide. Arranging this kind of scheduling for adult students and for students spread throughout multiple counties will be difficult but feasible. The learning

community format is considered a key feature of the college's program and will allow the members of each learning community to be supportive of each other as they go through the program and seek to complete their bachelor's degrees. Moreover partnering is also an approach to teaching work that the faculty hope to instill in these future teachers.

Regional Accreditation. Other community colleges have shown considerable interest in the steps required to add baccalaureate majors in teacher education in a manner consistent with regional accrediting association standards. SPC followed the process developed by its regional accrediting body, the Southern Association of Colleges and Schools. The steps involved include preparation by the college of an application to offer degrees at the baccalaureate level, consideration of the application by the appropriate SACS committee, approval by the full membership of the SACS Commission on Colleges, a follow-up visit after initial classes begin by a SACS visiting team, a report with recommended actions made by the visiting team to the commission, a five-year visit to assess the progress of the college, and finally, the assignment of the college to the standard ten-year reaccredidation cycle. In addition to the strong base of support already in existence for one of Florida's largest colleges, the legislature provided significant support to SPC, which helped the college address the regional association's accreditation criteria.

Closing Thoughts

St. Petersburg College is optimistic about this opportunity to address baccalaureate access needs in its service area. The legislature has given the college planning funds up front, has supported its needs for a quality facility and equipment for the new students, and has also recognized the importance of its partnership programs. In the last four years there has been a large increase in the number of partnership baccalaureate degrees offered on community college sites by private colleges and state universities. This increase is partly a response to the need for new teachers and partly a response to the recognition by leadership at four-year institutions that if they do not find a way to reduce the teacher shortage and also to ensure that nontraditional students have an opportunity to achieve a baccalaureate degree in their own areas of the state, then a viable alternative may be the direct offering of bachelor's degrees by former community colleges.

Community colleges seeking to offer the baccalaureate degree should be aware of the demands posed by funding, curriculum, marketing, student services, and staff and faculty resources. But a college should not to be so concerned about those demands that it does not seek to fulfill a need if it exists. It is important, too, for states to know that these baccalaureate programs can be of high quality. Programs can be structured to take full advantage of existing A.A. and A.S. degree programs at community colleges, and fees can be held below the levels at state universities.

This has been an exciting year of planning, program development, and transition at one of Florida's oldest institutions of higher education and the college eagerly awaits its inaugural class of bachelor's degree students. St. Petersburg College has responded to community needs for seventy-five years, and the new degree programs follow that tradition, recognizing and meeting area needs for graduates with bachelor's degrees in teacher education.

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This chapter describes factors contributing to the successful planning and implementation of alternative teacher certification programs in one Texas community college district.

Alternative Teacher Certification Programs and Texas Community Colleges

Paul B. May, Stephen G. Katsinas, and Lin Moore

Community college involvement in teacher certification is a relatively recent phenomenon but not unprecedented. Prior to World War II, especially in rural areas of the country, many junior colleges were established with the express purpose of acting as a pipeline for teachers (Hutcheson, 2002; Pedersen, 1987, 2000). In the 1940s, the early junior colleges were squeezed out of their role in teacher education by the acceptance of the baccalaureate degree by the normal colleges. Thus began a lively debate among leading community college scholars about the community college's future role (Hutcheson, 2002), with some scholars strongly urging that terminal education replace teacher education as the new focus. Today the debates about the role of the community college in teacher education have been renewed and have become entwined with the issue of alternative teacher certification (ATC), one of the most hotly debated issues of contemporary education (Kwiatkowski, 2000).

For many decades a degree in teacher education has meant four years of undergraduate study. In some cases education students completed some core education courses at a community college and then completed the major in teacher education and student teaching at a university. During the current severe teacher shortages, however, requiring completion of a four-year program does not adequately meet the hiring needs of public schools. Nontraditional teacher candidates and midcareer professionals often balk at the notion of starting over in full-time university courses

with students half their ages. An alternative approach—a fast track to certification—has become a necessity for providing qualified teachers for the nation's schools.

This chapter describes issues and challenges that several leading Texas community colleges have had to address in developing and implementing alternative teacher certification programs. This case study of Collin County Community College District is offered as an example of the issues a large multicampus suburban community college encountered as it made the decision to become involved in ATC and the barriers it had to overcome to create what it believes to be an appropriate educational program. An understanding of the challenges and successes of this new program may assist other practitioners in identifying key issues to consider as they develop their own alternative teacher certification programs.

Teacher Shortages: A National Concern

In 1992, the National Center for Education Statistics (NCES) released its first study assessing the future demand for K–12 schoolteachers. This study predicted that by 2008, more than 2.7 million new teachers would be needed (NCES, 1992). President Bill Clinton, in his 1997 State of the Union Address, highlighted the critical need for additional teachers to reduce class sizes in public schools (Clinton, 1997). Although most educators readily accepted these projections, some critics in the business press and elsewhere argued that President Clinton was "scaremongering" the issue and called for further investigation (Feistritzer, 1998).

Just a few years later, as Chapter One of this volume describes, the teacher shortage is readily apparent, driven by several forces, including growth in public school enrollment, reform efforts to lower class sizes, instability of the teaching workforce, and the impending retirement of many current teachers (Felter, 1997; National Center for Policy Analysis, 2002).

Alternative Teacher Certification

As evidence of a teacher shortage mounted in the 1990s, colleges of education were strongly encouraged by K–12 school districts, state officials, and agencies to develop creative alternatives to expand the base of new qualified schoolteachers. In 1983, only eight states offered alternative routes to certification (Feistritzer, 2002). By 1987, forty states had initiated processes through which holders of baccalaureate degrees could obtain temporary or emergency teaching permits.

Currently, forty-five states and the District of Columbia offer some type of alternative that allows persons holding the baccalaureate or more advanced degrees to eliminate the step of going back to college and majoring in education as a prerequisite for entering the teaching profession. Approximately 25,000 teachers nationwide were certified through alternative routes

each year between 1999 and 2001. Alternative teacher certification programs now contribute about one-third of the 75,000 new teachers certified annually nationwide. Of the 3.1 million schoolteachers in America, about 18 percent have been certified through alternative routes (Feistritzer, 2002).

The Texas Viewpoint

The Texas Workforce Commission (2002b) has reported that 82,000 new teachers will be needed in Texas classrooms by 2008. At the same time, teachers are leaving the profession in droves. According to the Texas Education Agency (2002), roughly 250,000 certified schoolteachers under the retirement age of sixty-five have chosen to opt out of teaching in Texas. The low average pay of Texas's schoolteachers ($38,857 in the 2001–02 academic year) may in part explain this phenomenon (Texas Workforce Commission, 2002b). Academic areas in short supply of teachers include science, math, bilingual education, special education, and technology (Texas Education Agency, 2002). Demands for certified teachers are particularly acute in densely populated urban school districts serving primarily low-income and minority students who are most at risk for school failure. Even with signing bonuses and recent pay increases, Texas is challenged to create a well-prepared teaching workforce.

State policymakers at the Texas Education Agency (TEA) and the Texas Higher Education Coordinating Board (THECB) are encouraging TEA's twelve Regional Education Service Centers, school districts, four-year institutions, and community colleges to become active players in alternative teacher certification. Changes in the Texas State Board for Educator Certification (SBEC) requirements have allowed more options for nontraditional routes to teacher licensing. A redesigned teacher certification program in Texas that began in the fall of 2002 streamlined the certificate structure by reducing the types of certificates offered, while requiring "greater breadth and depth of knowledge on the part of the beginning teacher" (Texas SBEC, 2001a, para. 8). The educator preparation programs must now be organized around standards for what teachers should know and be able to do. To reflect this new approach the State Board for Educator Certification amended the Texas Administrative Code to allow flexibility among preparation programs in meeting these standards.

"The state no longer mandates a specific number of semester hours or contact hours an individual must have to be recommended for a certificate, nor does the state require that an individual be prepared in more than one teaching field" (Texas SBEC, 2001b, para. 4). ATC programs now have the authority to establish program-specific requirements for their students, allowing multiple pathways to teaching.

Currently, there are thirty-one ATC programs in Texas, in addition to the approved teacher preparation programs already in operation at the seventy institutions of higher education across the state. One alternative option

allows the Texas state agency to approve noncredit certificate programs for those who already hold bachelor's degrees and who wish to acquire teaching certificates. One in four Texas schoolteachers hired in the last three years came into the teaching workforce through alternative certification. For each year between 1994 and 1999, 15,061 persons entered teaching, with 2,446 of these entering classrooms through emergency permits. Permits are granted to public school districts to hire a person who meets the minimum qualifications for a vacant position only when an appropriately certified person cannot be located (Texas SBEC, 2002.) Noncertified teachers must show evidence of working toward certification through a deficiency plan with a teacher preparation institution, participation in a district-sponsored grow-your-own program, or enrollment in an approved alternative teacher certification program. Texas clearly has made the policy decision to widen the possible entry points into the teaching profession in order to meet long- and short-term teacher shortages. It is in this policy context that Texas community colleges are being encouraged to initiate ATC programs.

Collin County Community College District's Approach to Alternative Teacher Certification

Collin County Community College District (CCCCD) officials developed what they believe to be the nation's first ATC program at a community college. The focus of CCCCD's ATC program was initially centered on producing technology teachers, a critical shortage area in the North Dallas telecommunications corridor. College officials hired a consultant, worked with the Texas SBEC, and developed a continuing education format to build a collaborative network with local school districts in Collin County. Twelve neighboring school districts were enlisted to mentor newly licensed teachers from CCCCD's program. In return for its program commitment, each school district received a position on the CCCCD ATC Advisory Board and gained "first crack" at hiring alternatively certified teachers who completed 150 contact hours of instruction and observation (B. Kihl, personal communication, June 5, 2001).

The impetus for CCCCD's ATC program flowed from an assessment of critical local labor market needs. The college district is located in a high-income suburban county north of Dallas that hosts the fastest-growing communities in Texas, and is one of the five fastest-growing areas in the country. According to Cary Israel, CCCCD president, area school districts engaged in high-profile, large-scale recruitment efforts outside the borders of Texas (C. Israel, personal communication, May 4, 2002). College officials were approached by local school superintendents in dire need of finding properly certified teachers in high-demand areas.

Program Structure. The college district's executive vice president, Toni Jenkins, coordinated the initial stages of the ATC program. Jenkins directs the district's workforce training efforts, and CCCCD officials saw

their involvement in ATC as both a workforce development and higher education issue (T. Jenkins, personal communication, June 30, 2001). The CCCCD ATC program was organized as a self-contained, one-year noncredit program with instruction provided on Saturdays, followed by a year of on-site mentoring in lieu of student teaching. This program received formal approval from the state of Texas and included both education and internship teaching components. Prior to undertaking the internship teaching component, participants completed eighty-eight contact hours of training in professional development, forty contact hours of content-specific pedagogy (such as a Methods of Teaching course for specific subject matter), and thirty hours of early field-based experiences combined with maintaining a reflective journal. They also were required to successfully complete the professional development and content area examinations required by the state of Texas (ExCET exams) for teacher certification. The thirty hours of early field-based experiences allowed students to ascertain whether teaching was the right career for them before investing further time and effort in the program. Upon successful completion of the training and the state ExCET exams, students were required to fulfill a one-year, successful, full-time teaching internship in an independent school district.

Mentoring was a key feature of the first-year teaching experience. The program's mentoring component was coordinated at the school sites of participating ATC advisory board members. The ATC teachers were thus welcomed in their workplaces. To administer the mentoring component, a major issue in new ATC program development, CCCCD initially advertised for an ATC mentor at a rate of $28,000 per year for full-time work. The job went unfilled in 2000–01. Unlike four-year institutions that can spread the costs of student teaching supervision on the backs of faculty members who have both field supervisory responsibilities and teaching loads, community colleges generally lack personnel with such flexibility. CCCCD's solution was to use six part-time mentors, augmented by on-line communications to promote the development of teaching portfolios.

For its initial program, launched in September of 2000, CCCCD found 105 interested applicants, 60 of whom were eligible for acceptance. Students admitted to the program were required to hold a bachelor's degree from an accredited university, with eighteen to twenty-four hours of this degree completed in a specific content area so that they would be qualified to teach at the secondary level. Interviews and entrance tests, which included the Texas Assessment of Scholastic Preparation (TASP), diminished the applicant pool to an initial cohort of 10, and all were interested in teaching secondary technology. Candidates most likely to succeed were selected for the first group. Aware of public attacks by opponents of community college involvement in ATC, the program developers wanted to counter suggestions that alternative routes to teacher certification represented "an obvious watering-down" of rigorous teaching standards (C. Israel, personal communication, May 4, 2002).

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Each ATC participant at CCCCD develops a professional teaching portfolio that demonstrates the candidate's professional development in the program. The portfolio serves to present the new teacher as a professional, in a manner consistent with the formal job application process. This is important because ATC participants are transitioning from other fields of endeavor and need to establish track records related to the education field. Portfolios include an autobiography, résumé, professional goals and objectives, educational philosophy, evidence of subject matter knowledge, evidence of pedagogical knowledge, and awards or honors. Performance evaluations, a classroom management plan, original lesson plans, and a video of a lesson document teaching effectiveness. The inclusion of perspectives on teaching, personal reflections, including school and student profiles, and documentation of other experiences gives hiring evaluators information to judge the newly certified candidates' commitment to the teaching profession. The portfolio therefore is a critically important component of CCCCD's ATC program design (CCCCD, 2002).

All ten students in the first cohort passed the state-mandated "exit exam" for teacher certification (ExCET) in August 2001, accepted secondary positions teaching technology, and began internship teaching at local school districts. It should be noted that only three new technology teachers in grades 8 to 12 had been certified in Texas in the year 2000. This underscores the fact that the college district was meeting a critical need. All ten teachers expressed a high level of satisfaction with teaching as a career move, and eight of those ten are still teaching in the 2002–03 academic year.

Second-Year Expansions. Applications for the second year of the program increased dramatically. A contributing factor was the collapse of the dot.coms, which precipitated a sharp decline in the telecommunications industry that had previously dominated the North Dallas corridor. The North Dallas corridor is home to major telecommunications firms, including Electronic Data Systems, Texas Instruments, Eriksson, and Nortel Networks; between 2000 and August 2002, the unemployment rate in Collin County jumped from 1.9 percent to 7.0 percent (Texas Workforce Commission, 2002a). As of May 2002, a cohort of sixty individuals was progressing through the program, which had now been expanded to offer secondary certification in math, biology, and history in addition to technology. CCCCD currently holds 120 applications for the spring 2003 cohort.

Costs to students were negligible due to federal grant support obtained by the college, in the form of U.S. Department of Education Preparing Tomorrow's Teachers to Use Technology (PT3) grants. Marketing literature developed by CCCCD emphasizes cost-free certification in computer technology applications. Most ATC programs sponsored by school districts and Regional Education Service Centers charge the candidates an average of $3,900 for teacher preparation (Kwiatkowski, 2000).

Challenges and Successes. It is important to note the sifting of curricular choices made by CCCCD officials as they first started and then

expanded their ATC program. To find sufficient funding, knowing that the start-up costs were going to be high, CCCCD officials phased out the district's horticulture program. It behooves others to carefully consider the extensive groundwork laid by pioneer community college officials in the ATC arena, prior to developing their own new programs.

CCCCD officials certainly experienced problems early in the process. College and state education agency officials were generally unfamiliar with the community college's role. The response, "We didn't know what we didn't know," was consistently heard during interviews with various CCCCD officials regarding the community college's role in ATC. The Texas State Board for Educator Certification made several policy adjustments and regulation enhancements to help guide CCCCD through the complex application process. Although the college had strong support from local school districts, the traditional certifiers of teachers—the area's four-year institutions—were highly suspicious. CCCCD was, after all, "just a junior college" and had entered the exclusive market turf of four-year institutions and the Regional Educational Service Centers. Concerns about CCCCD's involvement were publicly voiced at the state level during a meeting of the Texas SBEC in August 2000 (P. Tackett, personal communication, May 30, 2002).

Initial opposition was dampened after the THECB formally enacted policies in 2002 to encourage other Texas community colleges to enter the ATC arena. THECB subsequently recommended that legislators finance the start-up costs of new certification programs (THECB, 2002).

The long-term goal of the Collin Model is lifelong education. To this end, CCCCD partnered with Texas A&M University-Commerce to grant nine hours of graduate credit for work completed in Collin County's ATC program. This gives participants a running start toward the master's in education degree. The CCCCD is looking forward to the future and plans online course offerings, instruction by video, and professional development courses for updating Texas teacher certifications. The administration is also exploring ways to certify substitute teachers for local school districts. As a service to other community colleges, CCCCD makes available a free, extensive guidebook to help them navigate the ATC program development process. As of May 2002, nine Texas community colleges had followed Collin's lead, and started their own versions of ATC programs, tailored to the needs of their local school districts (Texas SBEC, 2002).

Look Before You Leap

The authors urge community college practitioners thinking about developing new ATC programs to proceed with caution: look before you leap!

The community college president who chooses to involve the institution in a state-approved ATC program faces several very practical issues. Is the college's involvement requested by the local school districts? Are local school districts willing to mentor and hire well-prepared candidates? Does

the college employ adequate staff with the knowledge and initiative to begin the ATC program? Are there other educational providers that might directly suffer as a result of this institution's starting an ATC, and if so, how can such concerns be addressed? Discussions with CCCCD staff and community college practitioners in other states, plus a review of the guidelines from the National Center for Alternative Teacher Certification Information (2002), produced the following list of factors that contribute to successful planning and implementation.

Labor Market Assessment. Careful labor market assessment and prudent planning are necessary to avoid duplication. One Texas college that worked closely with CCCCD to develop its own ATC program has experienced difficulty in filling its cohorts. The program is presently operating with an initial group of only five students. Careful planning is a must, because the up-front entry costs are higher for ATC than they are for most traditional academic and conventional workforce training programs in which community colleges become involved. The necessity for networking with local K–12 districts requires considerable investments of time and personnel in order to achieve program success.

Consideration of Competition and End-Users. Colleges are counseled to conduct a careful assessment of other ATC providers in the local marketplace. If the needs are already met by universities and Regional Education Service Centers, entry of a new player may be redundant. School district policies about hiring alternatively certified teachers, as well as local attitudes toward nontraditional candidates, should be considered. Lack of support for new teachers can easily undermine an otherwise successful ATC program.

Mentoring. From a program standpoint the role of the mentor appears to be crucial to the success of new teachers. The establishment and supervision of quality mentoring components, however, is costly and labor intensive. Selection and training of mentors becomes an ongoing process as candidates cycle through placements in local school districts.

Operational Costs. Effective budgeting is clearly tied to supporting the program for long-term success. A review of recipients of PT3 grants from the U.S. Department of Education in 2001 found four community colleges listed among ninety recipients (U.S. Department of Education, 2002). Federal and state support, such as PT3 funding, can also reduce the tuition costs borne by students. Collin County Community College District also issued a statement that it considered its ATC program part of its broad workforce development mission and subsequently applied for U.S. Department of Labor funds. By the end of the ATC program's first year, CCCCD had secured direct and indirect grant funding for ATC from federal Perkins and PT3 funds, offsetting student and institutional costs significantly. Although grant funding may prove a viable option, ongoing operational costs must be supported by long-term commitments from the community college. Building an appropriate overall budget was identified as a critical issue at CCCCD.

Advisory Committees. Continuing partnerships with local K–12 school districts are critically important. An advisory committee appears to be of great benefit in launching ATC programs. Mike Moncrief, a senior member of the Texas State Senate, advised that eliminating this step could be the biggest mistake that community colleges make in starting such cutting-edge programs (M. Moncrief, personal communication, Mar. 14, 2002). Collaborative designs with strong community support establish good foundations when developing ATC programs.

Starting Small. Start small and grow. It is better to have a widely acclaimed initial success on a small level and to build on that record of success and goodwill than to begin an ambitiously large program haphazardly. The Collin County district followed this wise approach.

Candidate Selection. The recruitment, screening, interviewing, and selection processes for candidates for ATC programs are quite different from typical community college application processes. State requirements for teacher certification, including assessments of basic skills, criminal history checks, and fulfillment of academic requirements, are nonnegotiable criteria. Additional qualifications may be determined by the community college ATC program.

Outcomes Evaluation. Careful consideration of program evaluation measures also contributes to program recognition and success. Although costs and benefits must inevitably be balanced, assessment measures examine multiple perspectives, including those of the candidates, on-site mentors, employers, and community college personnel. Rates of retention, completion, job placement, and teacher turnover also indicate an implementation's degree of success.

Emily Fiestenberg, founder of the National Center for Alternative Teacher Certification Information (NCATCI), characterizes a successful ATC as "a 'grow your own' source of diverse, mature, and resilient teachers and leaders for the nation's neediest students. . . . improving the quality of teachers available to bilingual, diverse, poor, urban, or rural students" (NCATCI, 2002).

Temporary Phenomenon or Permanent Fixture?

The Texas SBEC lists nine community colleges as approved ATC program providers; four were actively delivering programs as of May 2002. Between 1995 and 2001, the percentage of teachers trained through alternative certification programs in Texas increased from 16.9 percent to 24.5 percent. That meant an additional 1,034 teachers were trained through ATC programs, representing an increase of 41.5 percent in just six years (TEA and Texas SBEC, 2002).

It appears that Texas will continue to need ATC for the foreseeable future. The reasons this is so include the growth of population in urban Texas; the critical shortage of teachers in high-demand areas such as

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computer technology, math, and science; the critical shortage of minority teachers; the high attrition among regularly certified teachers during their first years in the profession; and the need to augment the efforts of four-year higher education institutions that are at capacity. Is community college involvement in alternative teacher certification anything more than a stopgap measure? This question deserves serious consideration, although it may be too early to frame a definitive answer. It is clear, however, that fast-growth states such as Texas are now actively promoting alternative pathways into the teaching profession. Not surprisingly, some of these same states, including Arizona and Florida, are also experimenting with offering baccalaureate degrees at community colleges.

Community colleges are in a unique position to help states alleviate teacher shortages. Clearly, community colleges have a vested interest in the success of K–12 schools. Such success lowers the numbers of new students who enter college in need of developmental education programs and services and has the potential to produce a more diverse teaching workforce. That said, it is clear that if community colleges are to become major players in alternative teacher certification, they need to carefully assess the local market first, working in close tandem with senior transfer institutions as well as local K–12 school district officials.

The crucial advantage of community colleges in teacher certification lies in the streamlined function that these colleges have always enjoyed: their speed in responding quickly and nimbly to local need and their flexibility in overcoming bureaucratic involvement. Now that state agencies are beginning to open their doors to alternative routes and nontraditional providers, it is time for community colleges to tackle the issues squarely. The prevailing attitude among some Texas community college leaders—"We've never done that before, so let's do it!"—appears to be inspiring many more community college leaders, both in Texas and across the nation.

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This chapter reviews the accrediting standards of the National Council for the Accreditation of Teacher Education and the Teacher Education Accreditation Council, assesses the ease or difficulty with which community colleges could meet the required standards, and suggests accreditation models appropriate for community colleges.

Accrediting Standards Affecting Mid-Level Teacher Education Preparation in the Community College

David G. Imig and Mary Harrill-McClellan

The premise of this chapter, the feasibility of accrediting teacher preparation programs at community colleges, is not an easy one to examine—not because specialized accreditation for teacher preparation programs at community colleges is impossible but because it is not widely discussed. Neither the teacher preparation accreditors nor the national associations for community colleges and four-year institutions have put forth position statements on this issue. Therefore what follows in this chapter is an explanation of what accreditation involves, the challenges in accrediting community colleges, and some suggestions for ways in which we can begin to think about accrediting teacher preparation programs at community colleges.

When the topic of accrediting teacher education programs at community colleges arises, several questions come to the forefront. Why should teacher preparation programs at community colleges get into the business of seeking accreditation? Could a cost-effective system of accreditation be created? Will the current interest of community colleges in expanding their course offerings in education make the accrediting of these programs more feasible or likely? And moreover, don't many of the people who take courses in education at community colleges go on to become teacher aides or day-care workers, never transferring into four-year programs to finish their degrees and to become fully certified teachers? Though these are only a few questions, they point directly to some challenges community colleges would face when seeking accreditation for their teacher preparation programs.

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In general, administrators at universities and in the professions seek accreditation because it lends legitimacy to their programs, it guarantees a level of quality, and it can bring prestige and positive attention to their work. Of late there have been many discussions concerning appropriate recognition for community colleges and the contributions they make to teacher preparation, as well as their accountability for the quality of the preservice candidates they produce. The American Association of Colleges for Teacher Education (AACTE) holds a stake in this conversation because as its mission and membership evolve to include not only traditional teacher preparation programs but also for-profits and alternative providers who are also offering teacher preparation programs, the AACTE must look to the community college as a stakeholder in teacher preparation. If it wants to ensure that its membership consists of quality teacher preparation programs, it needs to make sure all its members are held accountable for the quality of the teachers they produce because this outcome has a direct and positive impact on the quality of PK–12 student learning in this nation's classrooms.

In this chapter we introduce the two leading teacher education accrediting organizations: the National Council of Accreditation for Teacher Education (NCATE) and the Teacher Education Accreditation Council (TEAC). NCATE is emphasized because it a much larger organization than TEAC, and it accredits 98 percent of the traditional teacher education programs. We also discuss the issues surrounding accreditation at the two-year level and make recommendations about the ways states and institutions should address these issues. Though many community colleges graduate teacher aides and early childhood paraprofessionals, this chapter concentrates on the traditional population of community college students who take education courses in order to transfer into education programs at four-year institutions and to become licensed teachers.

Accrediting Two-Year Programs

When considering accreditation for two-year teacher education programs, the challenge begins with how a two-year program can be fairly and appropriately accredited and held accountable for the candidates it produces. As we look at NCATE and TEAC and two-year programs, it is important to define what constitutes a two-year program in teacher preparation. Community colleges offer associate degrees, 2+2 partnership programs, programs that lead to licensure (that is, baccalaureate and postbaccalaureate programs), and self-contained programs for paraprofessionals. Some have teacher preparation programs that are very structured, with a progressive curriculum, required field experience, and a supportive faculty. Others offer scattered education courses without a cohesive program. Baccalaureate and postbaccalaureate programs leading to full certification or licensure will be subject to the current NCATE standards. More challenging will be adapting

the current system to apply to two-year institutions that offer education courses at the lower-division level.

For the purposes of this chapter, when we talk about accrediting programs at community colleges we are referring to those colleges that participate in 2+2 programs. It is our assumption that the community colleges that have formal articulation agreements and transfer policies with their four-year counterparts have well-defined teacher preparation programs and a strong commitment to quality teacher preparation. They also have a working relationship with their counterparts at the four-year institutions, which would facilitate developing accreditation standards and processes for the community colleges.

With numerous community colleges offering state-recognized preparation programs for candidates who hold baccalaureate or advanced degrees in fields other than education, there is already an interest in specialized accreditation. It is these alternative terminal programs that will lead teacher education accreditors into the world of community colleges. In turn, this will likely cause community college leaders and the accreditors to explore the feasibility of accrediting transfer programs as well as self-contained two-year programs for paraprofessionals and day-care teachers.

One dimension of accountability in traditional teacher preparation programs is their accreditation. Although all teacher education programs must seek and maintain the approval of the state, more than half of the nation's education schools seek specialized accreditation as well. Community colleges want recognition for the contributions they make toward teacher education and the practicing teacher population. Some see accreditation as a source of recognition and a way to dispel the perception that some programs lack quality.

NCATE and TEAC Purposes and Standards

NCATE and TEAC represent two different philosophies about what accreditation of teacher education programs should look like. NCATE accredits the teacher education unit at four-year institutions and TEAC accredits specific programs within the teacher education unit at an institution. Both accreditation bodies use standards they have developed to determine whether a program meets their accreditation criteria.

Currently, four-year teacher education programs are trying to come to an understanding of the benefits and drawbacks of each form of accreditation—NCATE and TEAC. Although the majority of teacher education programs are accredited by NCATE, many now are looking at TEAC as an alternative to NCATE or as an additional source of program accountability. On the one hand, TEAC functions more as an internal audit. Education faculty are expected to submit an internal audit based on the principles of TEAC accreditation. NCATE, on the other hand, is more of an external audit. A team of NCATE examiners visits institutions seeking accreditation

and assesses the education programs according to a set of very specific standards for both the overall program and, in many cases, the specialty areas within it.

TEAC Standards. TEAC employs three quality principles to determine whether a program should be accredited or not. The first principle is evidence of student learning that reflects what students are expected to learn in education programs. This learning includes subject matter knowledge, information resulting from a liberal education, pedagogical knowledge, and teaching skills (TEAC, 2002). Faculty are expected to ensure that their students receive a well-rounded education and are knowledgeable in the subject areas they plan to teach, even if the education faculty do not teach those subject courses directly. Education faculty are expected to provide ample pedagogical teaching for the students, and students are expected to be able to incorporate this pedagogical knowledge they receive into their subject areas.

The second principle, valid assessment of student learning, has two components: (1) a rationale for the links among the program goals, student learning, and program features and assessment means and (2) evidence of convincing assessment (TEAC, 2002). This principle evaluates what is claimed in the first principle. TEAC accreditors want to see a link between the content offered in an education program and its impact on the teacher candidates in the program. They ask whether the faculty teaching makes a positive difference in the student learning. And TEAC wants to see valid assessment tools used to determine the impact of the education faculty on the quality of student learning in a program.

Institutional learning is the third quality principle, which looks at program decisions and planning in terms of evidence and influential quality control systems (TEAC, 2002). This principle ties what the faculty learn from their analysis of the first two principles into the way in which they improve their education programs. TEAC wants to see that the education faculty are constantly assessing their programs via valid assessment tools and are then improving or changing their programs based on the evidence obtained from this research.

NCATE Standards. NCATE uses six standards to guide the evaluation of an institution's eligibility for accreditation. The standards address candidate knowledge, skills, and dispositions; the assessment system and unit evaluation; field experience and clinical practice; diversity; faculty performance and development; and unit governance and resources (NCATE, 2002). In regard to the first NCATE standard, candidate knowledge, skills, and dispositions, students at two-year programs could easily be assessed at the end of their first two years of college to see if they should transfer into a four-year program to obtain their degree in an education major. If they are not already required to do so, students could take the Praxis I to determine the knowledge and skills they have learned at the two-year institution. The Praxis I is a standardized test that evaluates a student's reading, writing, and

mathematical skills. Most students finishing their second year at four-year institutions must pass the Praxis I in order to be accepted into the school, college, or department of education at the institution.

Dispositions, that is, the manner in which teacher education students interact with children, can be observed in the classrooms where students work. This would, of course, mean that if a community college does not require a field experience practicum, then it would have to find a way to get its students into the classroom. Observations of a student's interactions with children in the classroom, ability to change methods to suit the child, and ability to work with the classroom teacher would indicate a teacher candidate's predilection toward positive student interaction and positive student learning. An unintended consequence could be that community colleges would expand their programs to meet this standard.

NCATE's second standard, concerning the assessment system and unit evaluation, deals with the collection of data about a preservice teacher's qualifications and performance and the program's ability to assess its work and then improve itself based on the assessments. There are several assessment measures community colleges can use to evaluate the effectiveness and value of their programs. In addition to the grades students receive, community colleges can track how many of their students are accepted into teacher preparation programs at four-year institutions and how many actually transfer into these programs. Passing rates and scores on Praxis I state-mandated examinations should also be tracked by education faculty at community colleges.

NCATE's third standard, involving an examination of field experience and clinical practice, should be readily achievable for community colleges. Although candidates in the second year of school may not be qualified to student teach, they are capable of tutoring students, critically observing teachers in classrooms, and engaging as teacher aides in courses. Community colleges can build partnerships with their local PK–12 schools to provide experiential opportunities for candidates to work in a classroom. As part of a capstone course or as a separate course, students could be obligated to spend a certain number of hours in a PK–12 classroom observing, tutoring, and helping teachers.

Diversity in its many forms is the focus of NCATE's fourth standard. Community colleges should include teacher education curriculum that addresses a wide array of pedagogy (this includes culturally responsive pedagogy, pedagogy for bilingual students or English as a second language learners, and special needs populations) and ways of student learning. Compared to the student population in traditional four-year institutions, the student population in community colleges tends to be more diverse in socioeconomic status, race, and life experiences. As a result, many candidates in two-year programs bring with them a broader understanding of and experience with different populations. Community colleges, like four-year programs, can also form PK–12 partnerships with schools with different

mixes of students. Part of the field experience requirements in community colleges can also ask candidates to work with special education students, students of different racial and socioeconomic backgrounds, and students with various learning styles. Indeed, one of the reasons that community colleges are investing in full programs of teacher education is their ability to attract more diverse cohorts of candidates than traditional programs do.

The fifth NCATE standard addresses faculty qualifications, performance, and development. One of the significant differences between community colleges and four-year institutions is that professors are not required to have a Ph.D. degree to teach at a community college. However, some community college professors hold doctorates or have extensive PK–12 teaching or research experience. Currently NCATE finds that this standard has not been met if most of the professional education faculty do not hold doctorates or "exceptional expertise" (NCATE, 2002). This standard could be difficult for community colleges to meet if NCATE maintains the same requirements for community college faculty. Community colleges offering full teacher education programs probably have more faculty with doctorates, but teacher education faculty at community colleges that lack postbaccalaureate programs or that do not offer B.A. degrees would have to ensure that all the faculty have extensive experience inside the classroom and would probably have to work on hiring faculty with doctorates in order to meet this standard.

The last standard that NCATE considers in its accreditation criteria is the health of the teacher education unit in finances, personnel, resources, and leadership. NCATE wants to see that the institution supports the program with appropriate resources. It wants to see a strong relationship with the education faculty at the PK–12 schools in the community. It wants to see a clear recruiting and admission process for bringing students into the education division. Community colleges, for the most part, do not enjoy the financial resources that most of their four-year counterparts have. Equipment, materials, and space are usually more limited, and there are fewer faculty in teacher education units (and hence leadership opportunities) at community colleges compared to four-year schools. That said, though, criteria for meeting this standard could be developed that take into account the different structures in finances, personnel, resources, and leadership at community colleges.

Models of Accreditation

If the issue is that two-year programs other than those that lead directly to full certification to teach would like formal recognition for the contributions they make to teacher preparation and to traditional four-year programs, and if the accreditation bodies want teacher preparation institutions to be accountable for the teachers they produce, then there are models of accreditation or recognition that two-year programs, NCATE, and TEAC could consider. Here, for example, are two of the possibilities.

Option 1: Separate Accreditation of Community Colleges or Transfer Teacher Education Programs. One alternative would be for NCATE to develop an accreditation program for two-year institutions that would be separate from the accreditation that four-year institutions currently hold in NCATE but that would indicate the quality of the teacher preparation program and the quality of the students that a community college produces.

The standards for this recognition would be based on the standards the accrediting bodies used to accredit four-year programs, with appropriate changes made to accommodate the two-year institutional structure. Many of these changes were suggested in the previous section on NCATE standards. For example, the NCATE standards for community colleges that prepare preservice teachers to transfer into four-year institutions to complete the final two years of their education degree might include the following:

To address the purpose of Standard I, students should be required to pass the Praxis I before transferring to a four-year institution. Students must obtain an associate degree. Students should also have taken core education courses that can be articulated from the two-year to the four-year college, such as Foundations of Education, Multicultural Dimensions of Education, Reading, and so forth. Perhaps twelve to fifteen hours of education courses should be required of students before transferring. This is already the case in many states, such as Illinois and Florida.

To address Standard II, the two-year programs should collect data on student pass rates for Praxis I and should record student characteristics such as backgrounds and grades. Community colleges should track their students' progress through the four-year institution as well.

To address Standard III, students should be required to complete a certain number of clock hours in a public school classroom as a teacher's assistant, as an observer, or in some other function.

To address Standard IV, the teacher preparation curriculum should address issues of diversity in education, and students should have the opportunity through their field experience to work with children with different learning abilities and different races and ethnicity.

To address Standard V, faculty should have at least a master's degree in the education field and no less than five years experience in the PK–12 classroom, though this should be left up to the state to decide because many states have existing agreements with NCATE. Faculty should also exemplify master teaching in their courses. They should be able to demonstrate many ways of conveying information to their teacher candidates and of fostering learning. NCATE includes a scholarship component in this standard as well. Though community college faculty do not face the same pressure as four-year university faculty do to publish, a minimum standard could be designated by NCATE that would show that faculty at community colleges are keeping up with research in their profession and are making contributions to it.

To address Standard VI, the teacher preparation programs at two-year institutions should have a defined structure within the community college to which funding is designated, and they should be provided with the necessary facilities, resources, and personnel. There should be evidence that the education program at the community college is a priority for the school and that there is strong leadership within the education faculty that promotes strong education coursework and high levels of student learning.

The advantage to this model of accreditation is that the community college could be fully accredited on its own. Although the authors believe that 2+2 partnerships are the best models for teacher preparation at community colleges, the community college would not be required to have a formal association with a four-year institution. This model of accreditation would also ensure rigorous standards for the teacher preparation program, and for those community colleges that do not already have developed teacher preparation programs, it would compel them to develop a cohesive teacher preparation program before seeking accreditation. This could only improve the quality of the preservice candidates produced.

Option 2: Umbrella Accreditation. Another alternative would be to recognize, but not fully accredit, quality two-year programs that are linked to four-year programs. These would include two-year programs that have formal articulation agreements with their four-year counterparts and two-year programs that are major feeders into four-year institutions without such agreements. A community college's eligibility to be recognized by NCATE and TEAC would be directly linked to its relationship with a four-year NCATE or TEAC accredited teacher preparation program. This criterion for accreditation would ensure that community college programs with NCATE or TEAC accreditation make direct and quality contributions (in the form of teacher candidates) to the PK–12 system. And, it would promote collaboration between the two-year and four-year programs. The four-year programs would be responsible for ensuring that two-year programs produce students who come into four-year programs with the same knowledge that students in their first two years in the four-year program obtain. The standards suggested in the first option could be used as guidelines in this scenario, although the basis of recognition in this option rests more on the quality of teacher candidates at the end of their first two years at the community college as compared to the quality of their four-year counterparts at the end of their first two years.

There are two advantages to using this second alternative. First, if four-year accredited preparation programs are producing quality teachers, as judged by the positive impact of the graduating candidate's teaching on student learning in the classroom, then whether a student completed all four years in a traditional program or transferred in for the last two years, the same quality of student is graduating. There is a caveat to this statement: if the four-year institution ends up providing a developmental education,

tutorial services, or other assistance designed to improve precollegiate skills, then the transfer student places a larger burden on that institution's resources than the native student does. And this does happen with transfer students. Therefore it would be important for institutions to make sure that transferring students actually have knowledge and skills equivalent to those of mid-preparation four-year students.

Both parties to the 2+2 agreement could determine common measurements of competence and ability that all students at the end of their sophomore year must meet, whether at a community college or four-year institution, before entering the teacher preparation program. This measurement process could take the form of a student portfolio that includes the student's test scores, field experience, report cards, and so forth. Or it could take the form of a common test that all students would have to pass at the end of their sophomore year before entering the final two years of their teacher preparation.

The second benefit is that recognition of the teacher preparation program at the community colleges is directly tied to its relationship with a four-year program. This *umbrella* method would ensure that community colleges provide the quality and content needed for their students to go on to be successful in four-year programs. Given the form of elementary education programs, candidates often take their only courses in the humanities and sciences at the community college and thus meet this degree requirement with courses taken in the first two years. It is important that these courses meet the needs of prospective teachers. Guaranteeing articulation of students from two-year to four-year programs not only increases the number of teachers in the classroom but also provides the opportunity for both the two-year and the four-year program to share resources and produce high-quality students.

Next Steps

Where do we go from here? Before community colleges can seek accreditation these challenges need to be addressed:

The elephants in the room, ignored up to now, need to be discussed. Most significant among these elephants are the attitudes four-year institutions have toward community colleges and vice versa. These attitudes have prevented dialogue about accrediting teacher preparation programs at community colleges.

Curriculum and standards in 2+2 programs need to be aligned to achieve the consistency and standardization that will enable a fair evaluation for accreditation.

Four-year institutions and community colleges need to work together to resolve the resource issues they face, and find ways in which they might share accreditation costs.

Conversations initiated by the American Association of Community Colleges (AACC), the Association of Community College Trustees (ACCT), and AACTE, at a conference on the community college role in teacher preparation in the fall of 2002, could lead to full-scale efforts to accredit programs by both TEAC and NCATE. These conversations need to continue, with concrete efforts made to determine the best way to accredit community colleges.

Conclusion

At the beginning of this chapter we stressed that this conversation about accrediting two-year teacher education programs at community colleges could be only hypothetical because neither education accrediting bodies nor community colleges have taken formal steps toward accreditation. The rapid expansion of 2+2 programs as well as the growth of alternative preparation programs for baccalaureate degree holders will facilitate the accreditation of community colleges. That said, we believe that accreditation could be a real possibility for education programs at community colleges and would benefit both two-year and four-year education programs.

This move depends on NCATE's and TEAC's adapting their current standards or writing new standards for community college education programs. The revised standards would take into account the different structure and in many cases constraints of the community college program compared to the traditional four-year program. The accreditation process with NCATE and TEAC is time consuming and expensive. This may be a hindrance for some community colleges seeking teacher education accreditation; however, the demand to showcase the highly qualified candidates produced by community colleges will accelerate the movement.

A place to begin would be to have community colleges and traditional colleges and universities seek joint accreditation for community college feeder or transition programs. The accreditation process would compel the education faculty at the community college to assess their program for its impact on teacher candidate learning and to make improvements in the areas needed to gain accreditation. Accreditation would also "guarantee" a level of quality in the teacher candidates the community college produces. These candidates would then be better prepared to transfer into a four-year program to complete their teaching degrees. Accreditation would be particularly effective if it was tied to articulation agreements between two-year and four-year schools. Then the transferring students would be in a better position once they entered the four-year program, and the two-year and four-year schools could find ways to collaborate. Whether or not education programs at community colleges should be accredited is not for these authors to decide, but it is a serious question that deserves significant consideration from community colleges, four-year institutions, and NCATE and TEAC.

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This chapter discusses the evolving role of the community college in teacher education from the standpoint of state policy issues.

The Role of State Postsecondary Education Policy in Supporting Teacher Education at the Community College

Tricia Coulter and Edward Crowe

To ensure that our nation's children have the competent teachers they need, long-range and comprehensive efforts focused on teacher education are needed at the state level. Although local colleges and universities are trying hard to increase enrollment in teacher preparation programs and to revise curricula to ensure quality in the programs they offer, state-level coordination is needed to bring the K–12 and higher education sectors together to prepare and retain sufficient numbers of competent, classroom-ready teachers.

In this chapter we provide an overview of the structure and authority of state higher education agencies, concentrating on their role in academic, funding, and information system policies and practices. We then touch on the key state policy issues; decisions about these issues affect the manner in which and extent to which community colleges are involved in addressing teacher quality issues in the state, specifically through the structure and function of preparation programs. Finally, we suggest ways that states can encourage greater cross-system collaboration among K–12 schools, community colleges, and universities to promote systemic solutions to the related crises of teacher supply and teaching quality in the United States.

Role of State Higher Education Agencies

Every state system of postsecondary education includes an agency with responsibility for the governance or coordination of the institutions making up the system. The primary coordination function of a postsecondary

education agency is to ensure that the operations of the postsecondary institutions for which it is responsible are aligned with each other and with the priorities of the state. This coordination function is carried out both through formal structures and through such informal processes as networks and associations, as well as through legislative action (for a more detailed discussion of state postsecondary coordination and governance, see McGuinness, 1997). Examples of specific responsibility areas are outlined in the following sections.

State Planning. A primary function of state agencies, statewide postsecondary education planning traditionally took the form of long-range or master plans. Increasingly, however, state planning for postsecondary education is taking the form of strategic plans. Often created by a group of education, business, and community leaders empanelled for this purpose, strategic plans tend to be more responsive to the public agenda and priorities than were long-range or master plans. This shift to strategic planning for postsecondary education also reflects a general movement of postsecondary education toward being a more market-driven enterprise, acknowledging competition from educational entities outside the traditional realm.

Academic Policies. The creation and implementation of academic policies is of primary importance in any higher education system. Each state agency has a system whereby academic policies are created, reviewed, and implemented. When it comes to teacher education issues, academic policies are expected to address the teacher shortage in this country. It is the postsecondary education agencies that create or implement policies offering students alternative routes for entrance into teacher preparation programs, that determine which institutions will take responsibility for various levels of teacher education, and that decide on content and accountability processes for the quality of teacher education programs in general. Therefore these agencies are also involved in shaping professional development programs to address the requirements for the "highly qualified" educators defined in the federal No Child Left Behind Act.

Issues of institutional mission are also relevant to the teacher quality policy arena. In particular, state postsecondary agencies often have statutory authority to set or change the recognized mission of a higher education institution. Permission to offer doctoral programs or to evolve to a research-oriented mission (the lack of such a mission has been suggested by some critics as one reason for the relegation of teacher preparation to a less important status on many university campuses) often lies within the authority of state higher education agencies. Similarly, in states where community colleges seek to offer baccalaureate degrees in teacher education, the higher education agency (and sometimes the state legislature) must review and approve this step.

Data, Reporting, and Accountability. Another primary function of a state postsecondary education agency is the maintenance of statewide information or data systems. Critics have pointed out that state data and

information systems are woefully inadequate to the task of gathering relevant statistics on the status of teaching in a state. As a result, it is argued, states do a poor job holding programs accountable for their quality or for the performance of their graduates who become teachers. For instance, both the recent Education Trust (2002) report on the federal Title II teacher quality report card, *Interpret with Caution,* and the Title II report published by the U.S. Department of Education (2002), *Meeting the Highly Qualified Teachers Challenge: The Secretary's Annual Report on Teacher Quality,* address the issue of state policy on teacher quality.

Funding Policies. The allocation of resources is a clear and straightforward manifestation of a state's priorities. One of the pressing issues in improving teacher preparation in the United States is the extent to which teacher training is supported as an intensive clinical activity, with college or university faculty involvement in school settings to supervise practicing teachers. This clinical function has significant funding implications. The cost of training new teachers can be an important policy matter, especially if state officials recognize that high teacher turnover, with the attendant need to train replacements for those who leave after a year or two, imposes endless and repetitive high costs as a result of churning teachers through the K–12 system.

K–16 Role and Partnerships. Rather than dealing with a student's persistence and progress once enrolled in an institution of higher education, postsecondary education agencies are now involved in a number of K–16 initiatives and partnerships in order to create seamless articulation from high school into higher education. The preparation of teachers is best approached as a K–16 issue. In the words of the Carnegie Corporation's Teachers for a New Era program, "education should be understood as an academically taught clinical practice profession, requiring close cooperation between colleges of education and actual practicing schools" (Carnegie Corporation, 2002). Additionally, there is a K–16 emphasis specific to teacher education programs in ensuring that the subject matter content of teacher preparation programs is aligned with K–12 content standards.

Key State Policy Issues

Several key state policy issues arise naturally as states work to find ways to address the teacher shortage and to improve teacher preparation programs. As mentioned earlier, how states and state agencies of higher education respond to these issues directly affects the manner in which and extent to which community colleges are involved in teacher preparation. Although certain issues will be particular to a given state, a number of issues are of universal importance. Several of these are discussed here.

Role and Mission Designation Responsibilities. Intrinsically involved with a state higher education agency's role in state planning for education is the approval of the roles and missions of the institutions within

the system. Institutional mission statements serve to clarify the distinct role of each institution in the context of the system as a whole and of the education-related goals and priorities of the state. With their responsibility to approve these mission statements, state higher education agencies must ensure that the educational needs of the state are being met and at the same time ensure that the mission of one institution does not infringe upon the mission of another. Concerns over this type of "mission creep" are not just territorial; expanding the mission of one institution means that it can offer additional programs, and these might have serious repercussions on enrollments and resource allocation systemwide.

Specific to teacher education programs are concerns among state policymakers about teacher shortages and the speed with which traditional university-based teacher preparation programs are willing to improve their own quality. The expansion of teacher preparation into community colleges is one way to address these concerns. State higher education agency responses vary from altering or expanding current community colleges offerings for articulation and transfer to allowing community colleges to offer a bachelor's degree in teacher education (these examples will be further discussed later).

In addition to being responsive to the needs of the state, state higher education agencies need to be responsive to the needs of their institutions. The creation or expansion of programs requires resources. If new resources are not available, the instigation of new programs requires a reallocation of existing, finite resources. This issue is particularly relevant given the financial constraints and retrenchment that the states are currently facing. Also, offering teacher preparation program options outside of four-year institutions may initially affect enrollment in those institutions' programs. This is an important consideration because enrollment is used as a measure of academic program accountability. The counterargument is that an increase in teacher preparation program options will not produce a redistribution of students because the students enrolling in the newer options will be mostly those who would not have enrolled at *any* institution otherwise.

Program Approval Criteria and Procedures. Because an institution's mission statement serves as a template by which the appropriateness of new and existing programs is judged, expansion of an institution's mission statement is directly related to program approval. The process for establishing new programs can be quite involved. Petitions for program approval usually must include estimates of initial and sustained financial and other resource requirements, identification of potential sources of funding, estimates of potential revenue generated by the program, and a determination of the need for the program, the proposed enrollment rates, and the potential impact on programs or enrollments at other institutions.

As mentioned previously, changes and expansions in the teacher preparation offerings at community colleges are one way in which state agencies of higher education are attempting to meet the challenge of increasing the

supply of teachers and the quality of teacher education programs. Two types of efforts are briefly discussed in the following sections:

Offering B.A. Degrees in Teacher Education at Community Colleges. Both Florida and Nevada have authorized a community college in their states to offer bachelor's degrees in teacher education, and other two-year colleges are expected to follow suit (Evelyn, 2002). This is an ambitious response to teacher supply and quality concerns, and obtaining approval for this type of program may be challenging. Prior to granting approval, state agencies of higher education must consider a number of issues, such as the additional faculty and resources that will be required to implement the program, the impact the program would have on other institutions in the state, and the overall sustainability of the program.

Changing Articulation and Transfer Policies. Articulation and transfer policies define the ease with which students enter institutions or move between them in pursuit of their educational goals. Changes in articulation and transfer policies often take the form of altering or expanding courses or two-year degrees offered at the community college. This issue is of particular relevance to community colleges involved in teacher education that do not offer a self-contained four-year program. State higher education agencies often approve clearly designated 2+2 programs, in which an individual community college or a group of such colleges enters into an agreement with a four-year institution about transferability of courses. In Maryland this has taken the form of offering a new type of two-year degree, an associate degree in teaching (see Chapter Four). This allows students who successfully complete this degree to get full credit for their work at the community college upon enrolling in a teacher preparation program at a four-year institution (Evelyn, 2002). Some states even have 2+2+2 programs, reaching down into high school for recruitment into teacher education programs (Waiwaiole and Boswell, 2001).

A number of issues need to be considered by a state higher education agency in determining how best to use community colleges in teacher preparation. One such issue involves resources. Depending on the specific institutions involved, it may be less resource intensive to change course offerings at a community college in order to establish a 2+2 program than to create a bachelor's degree program at that college or to make the necessary changes at a four-year college to accommodate increased enrollment. Another issue is cost and convenience for the students. Course costs at a community college are usually lower than those at a four-year institution. Additionally, a community college may be more geographically accessible for students or, in keeping with these colleges' responsiveness to the community, may offer courses at more convenient times.

Accreditation Issues. Of additional concern for state higher education agencies relative to articulation and transfer policies are issues of accreditation. Teacher education accreditation agencies have strict procedures and criteria that must be met and need to be considered in establishing appropriate

articulation and transfer policies. The institution graduating the student is held responsible for the quality of the educational experiences. For 2+2 type programs, this means the four-year institution. For this reason there needs to be a rigorous system in place for judging the appropriateness and quality of any courses a student wishes to transfer for academic credit into the teacher education program from which he or she intends to graduate.

Articulation, coordination, and accreditation issues argue strongly for close alignment in teacher preparation activities between the two-year and four-year institutions in a state. Just as arts and sciences faculty and education faculty on the university campus must work closely together to ensure effective teacher preparation, the same working relationships are essential in states where significant numbers of teachers begin their postsecondary education on the two-year campus. In the accountability era, where university programs are held responsible for licensure pass rates of their program graduates in subject matter and other areas, it would seem a matter of enlightened self-interest to recognize that cross-campus alignment and collaboration are productive activities. But just as arts and sciences collaboration with education on the campus is a struggle rather than the norm, successful collaboration across campuses or among systems of higher education in a state is challenging.

The current federal emphasis on developing alternative routes to certification and streamlining the system by which individuals from other fields can become certified as teachers also must be considered in establishing articulation and transfer policies. This emphasis may now require that policies be put in place allowing students to receive credit for a wider range and diversity of experience than has previously been the case. With schools, school districts, not-for-profit, and for-profit organizations all playing significant roles in "alternate pathways" for training new teachers, the pressure is mounting on two- and four-year institutions of higher education to move faster in providing solutions to the challenge of producing high-quality teachers.

Challenges and Opportunities in Teacher Quality Policy Development

On the issue of teacher quality, crises of one kind or another generally characterize the state policy environment. These crises take several forms:

Overall shortages of K–12 classroom teachers
Teacher shortages in subject areas such as math, science, foreign languages, special education, and ESL
Local teacher shortages in urban or rural districts
Too few minority teachers, especially given the demographic composition of the K–12 student population
Concerns about teacher quality and preparation program quality

High teacher turnover, particularly of new teachers, which is often attributed to problems with program quality, lack of effective mentoring and induction, problems in school working conditions, and the attractiveness of other employment options

A familiar response to the teacher shortage crisis in many states is to lower standards by weakening entry or exit criteria for preparation programs, reducing licensure test cut scores, or using various backdoor stratagems to exempt teacher candidates from licensure or certification standards. Thus, in more than one state, it is possible to work as a teacher on a "temporary certificate" until one is ready to retire. Such situations reflect a clear abdication of responsibility by the state for the improvement of teacher preparation, and this needs to be addressed by state agencies of higher education.

What can states do? The challenges surrounding the supply, retention, and quality of teachers are highly visible and thus create opportunities for state higher education agencies to use the policy levers described earlier to help craft effective solutions. In fact, the authors believe the time is ripe for these agencies to *initiate* policy to meet compelling state needs

System Alignment. In states where significant numbers of teachers begin their postsecondary education at two-year colleges, there are several critical system alignment issues that often need attention. Quality preparation programs build on subject matter knowledge by focusing on teaching skills, clinical practice skills, and the ability to use technology effectively. Maintaining this focus requires coordination and interaction among faculty engaged in all aspects of the program. In 2+2 programs, community college faculty need to collaborate closely with university faculty to be sure students are acquiring both subject content knowledge and teaching skills in those subjects. In four-year programs, at either a community college or a university, arts and sciences faculty should collaborate closely with education faculty to ensure the same thing.

Additionally, preparation programs are held accountable for the subject matter knowledge of their graduates, through licensure test results and assessments of the K–12 classroom performance of new teachers. Usually the results of such assessments are distributed to the institution from which the student graduated, with the intention of providing feedback mechanisms about the effectiveness of the preparation program. However, this intention may fail when some or all of the academic content training is acquired by the student at another institution. In the case of a 2+2 program, close alignment between the two- and four-year institutions involved allows both institutions to use this type of feedback to increase accountability and as a tool for improving the preparation program as a whole.

However, state agencies of higher education should not focus just on alignment within their own system. States should also do more to align their K–12 student learning standards with the standards they have for new

teachers, taking steps to ensure that coursework and other preparation program requirements specifically address each of the standards. This requires statewide K–16 partnerships and local partnerships that include community colleges, universities with teacher preparation programs, and the schools that both sets of institutions hope to serve. This ensures that all programs and institutions that have a role in preparing new teachers design their curriculum around the needs and high achievement goals of K–12 schools. State higher education agencies have the capacity and visibility to convene K–16 groups for this purpose.

Academic Policy Initiatives. Articulation and transfer policies have seen lots of activity in state higher education systems. In most states students now have more opportunities to receive full credit for their work at one institution when they transfer to another college or university, especially in the public sector. But the evolution of such new approaches to teacher preparation as community college–based alternative certification programs and associate or even bachelor's degrees in teacher education is likely to put increased stress on existing articulation and transfer policies. This may be particularly true in states where the de facto status of the community college as a major force in the state's teacher preparation system (because of the sheer numbers of students who start at the two-year college before going on to complete a teacher preparation degree at a university) is given explicit recognition through specialized associate degree programs, state and federal accountability mechanisms, or standards alignment efforts.

Alternative Pathways to Teaching. The proliferation of alternate certification programs across the country is creating vast networks of new providers. Community colleges have many advantages in offering nontraditional pathways to full state licensure as practicing teachers. Their community location and local funding ties, connections with (and in some cases historical origins in) K–12 schools, and geographical proximity to urban or rural districts with teacher shortages all may serve as advantages in certain places around the country. The challenge for state policymakers is to work with new and emerging program providers to make sure they are held to the same high standards of quality that the traditional programs are expected to meet. This means, in particular, that community colleges and state higher education agencies must think through the methods that alternative programs can use to give prospective teachers a sophisticated understanding of child development and scientific knowledge about the ways children learn and grow.

Accreditation and Accountability. If we are to make progress away from acting with the crisis mentality resulting from the teacher shortage and instead are to build state policy on the notion of high-quality preparation and effective teacher retention strategies, states and others will need to address evidence-based program accreditation and accountability. All providers and all program completers should be held to the same high standards regardless of the type of institution through which the program is

provided. And in the era of the federal Title II Higher Education Act (HEA) report card for teacher quality and the promise of high-quality teaching embodied in the No Child Left Behind Act of 2002, the data resources and program review policies of state higher education agencies can be effective tools to promote the goal of high-quality teaching for every child.

Funding Policies and Incentives. Preparing teachers is, among other things, a clinical practice activity. College and university faculty cannot prepare new teachers with the clinical skills and classroom management strategies needed for their success unless resources are allocated to support a faculty presence in the schools. This fact has implications for the ways institutions of higher education are funded to deliver teacher preparation courses or programs. It also has consequences for the ways these campuses *allocate* the resources they get. State higher education agencies can assess the current capacity of state funding formulas to provide these resources and can work with institutions to help them budget for strong and effective clinical programs. This is important in all education programs, but it should receive particular attention in the alternate pathways programs where students start with academic content knowledge but need to learn how to teach their subjects successfully to real-world students.

Conclusion

This is a time of ferment and change in all aspects of teacher preparation in the United States. Numerous initiatives and experiments are underway to fix real or perceived problems in recruiting, preparing, supporting, and holding accountable all new teachers and the programs that prepare them. The fundamental fact, though, is that the new teacher supply will never match the demand unless we stem the tide of teacher turnover. Community colleges and state higher education policymakers can help all those involved in our teacher preparation "system" to rethink current approaches to supply-and-demand policies. One of the key challenges is getting state systems of education and higher education to think and act as systems, instead of operating as discrete sets of institutional players with well-defended barriers to collaboration. Community colleges are playing important roles in the provision of new teachers. Working with state higher education systems in innovative ways, institutions will find the opportunity exists to act together in order to ensure that every child in the United States has a caring, qualified, and competent teacher. It is long past time to make good on that promise.

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10

This concluding chapter describes resources related to teacher education at community colleges, including national perspectives, issue papers, examinations of student experiences, and literature summaries.

Sources and Information: Teacher Education at Community Colleges

R. Dean Gerdeman

The programs and issues discussed in this volume indicate that teacher education is an expanding function of community colleges. Although there has been increased attention in this area recently and community colleges have been involved in teacher preparation in various forms for many years, the body of literature related to teacher education in community colleges is probably best described as emerging. A number of articles and reports have been produced over the years, though substantive research on the topic is limited. Much of the literature either focuses on the experiences of specific institutions and programs or attempts to provide an issue or policy perspective, typically arguing for greater use of community colleges in teacher education.

This chapter provides a discussion of several documents related to teacher education at community colleges from the ERIC database. In addition to ERIC documents, the chapter includes a recommended readings list of journal articles. ERIC documents (listings with "ED" numbers) may be read on microfiche at approximately 900 libraries throughout the world. Also, most documents may be ordered on microfiche or in paper copy from the ERIC Document Reproduction Service (EDRS) at (800) 443-ERIC. Some of the ERIC documents in this chapter had not yet been assigned an "ED" number at the time of this writing and can be located in the ERIC system through their clearinghouse number (beginning in "JC" or "SP"). For a list of libraries housing ERIC microfiche documents, contact the ERIC Clearinghouse for Community Colleges at (800) 832–8256 or via e-mail at ericcc@ucla.edu. Journal articles (abstracted in ERIC, under an "EJ" number) may be acquired through libraries, from the journal publisher, or for a

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National Perspective

National research on the extent of teacher education at community colleges and the approaches used by these colleges is relatively limited. The documents in this section provide a national perspective through original research or summaries of previous research.

Hudson, M., Principal Investigator. *Final Report (Revised) for the National Study of Community College Career Corridors for K–12 Teacher Recruitment.* Belmont, Mass.: Recruiting New Teachers, Inc., in cooperation with the National Partnership for Excellence and Accountability, 2000. (ED 448 158)

This report presents the findings of a national study of community college teacher education programs conducted by Recruiting New Teachers (RNT), Inc. [http://www.rnt.org]. In 1999, a survey was mailed to presidents and deans of 1,575 community college campuses. The survey asked respondents about the teacher preparation programs and activities on their campuses, including their origins, funding, size, demographics, and characteristics such as curriculum, articulation agreements, and partnerships. Respondents were also asked to identify the strengths and needs of their programs. RNT received 205 surveys, for a response rate of 13 percent, representing colleges from forty-six states and Puerto Rico and including urban, suburban, and rural colleges.

Of the 205 returned surveys, 111 respondents indicated that their campuses had a formal teacher education program or teacher education activities and 94 respondents indicated no such programs or activities. Among the 111 campuses with programs or activities, RNT notes that there is substantial variation in size and program scope, from formal schools of education with large student bodies to informal programs serving very small numbers of students. The programs had a substantial proportion of nonwhite students (approximately 40 percent on average) and a relatively high transfer rate (approximately 50 percent on average). Almost three-fourths of the programs included field experience and over three-fourths had articulation agreements with a four-year institution. Goals highly ranked by the respondents included preparing prospective teachers for transfer, assisting paraprofessionals in their careers, increasing the number of minority teachers, and increasing the number of teachers in high-need areas. Finances were clearly important to the respondents as tuition and personal financial pressure on students were frequently cited as barriers, and greater funding was mentioned as a need.

Using the survey findings, RNT highlighted several characteristics of successful programs: articulation agreements and joint admissions, formal

introductions to a local four-year institution, counseling resources, and adequate funding. The report primarily provides a descriptive summary of the respondents' answers to the various survey items. Though substantive information on program structures and characteristics is beyond the scope of the report, it is valuable because it provides a rare national summary of the ways community colleges approach teacher preparation.

Moore, W. *Community Colleges and K–12 Teacher Preparation.* SERVE Policy Brief. Greensboro, N.C.: SERVE, 2000. (JC 020 559)

This article, a publication of SERVE at the University of North Carolina at Greensboro [http://www.serve.org], provides a discussion of ideas and goals related to teacher preparation at community colleges. Moore argues that community colleges are key to helping the nation alleviate the teacher shortage, and summarizes the findings and conclusions of several previous studies and articles before proposing a series of policy recommendations. Findings from studies or projects by the Florida State Department of Education, the Illinois Community College Board, the Education Commission of the States, the National Science Foundation, the AT&T Foundation, and Recruiting New Teachers, Inc., are included in the discussion, along with key points from several other published works. Based on the research, Moore's suggestion is that community colleges are involved in teacher preparation in a limited way and that "active participation" by the colleges in teacher education could help alleviate teacher shortages. Moore concludes by offering several policy recommendations that focus on prioritizing the role of community colleges in teacher preparation, providing appropriate courses and experiences at community colleges to help ensure success in teacher education, coordinating articulation and partnerships, and expanding recruitment of teacher education students at the community college.

The Center for Community College Policy. *Policy Issue: Community Colleges' Role in Teacher Preparation.* Denver, Colo.: Education Commission of the States, 2002. (JC 020 643)

This paper by the Center for Community College Policy [http://www.communitycollegepolicy.org], affiliated with the Education Commission of the States, provides an overview of the national problem of teacher shortages and describes the ways in which community colleges are "part of the solution," due to their potential to increase the number of new teachers in the teacher supply pipeline, expand the diversity of the teaching force, and provide continuing education, affordability, and accessibility. Exemplary programs from several colleges and districts across the nation are briefly described, and several state policy challenges and options are discussed. The article includes a list of quick facts and descriptions of what nineteen states are doing with respect to community colleges and teacher preparation. Also included are lists of additional readings and Web sites.

Issue Papers

One common type of paper found in the literature is the issue paper, in which authors advocate for changes in policy or practice related to some aspect of teacher education at community colleges. The issue papers described in this section were produced by the American Association of Colleges for Teacher Education (AACTE), the Education Commission of the States (ECS), and the National Science Foundation (NSF), organizations with important voices in teacher education.

American Association of Colleges for Teacher Education. *The Community College Role in Teacher Education: A Case for Collaboration.* AACTE issue paper. Washington, D.C.: American Association of Colleges for Teacher Education, 2002. (SP 041 085)

This paper discusses ways for member institutions of the AACTE [http://www.aacte.org] and other organizations to increase collaboration on teacher education between two-year and four-year colleges. The paper points out that community colleges play a key role in teacher education, but that collaboration between two-year and four-year institutions is complicated by course alignment, differing standards, and lack of articulation agreements. Challenges to increasing collaboration that exist within schools of education include lack of faculty time and interest, frustration over sharing scarce resources with alternative providers such as community colleges, accountability and quality expectations that differ from those of other providers, and a priority of establishing relationships with P–12 schools.

AACTE makes a number of recommendations (with some example programs cited) for ways that member institutions could improve collaboration, including promoting community colleges as a key part of the teacher education system, developing articulation agreements and joint programs, incorporating strategies for the delivery of distance-based and satellite programs, and holding students across institutions to similar standards and expectations. AACTE recommends that its national organization, along with state chapters, convene forums and meetings focusing on collaboration between two-year and four-year institutions, identify and publicize effective models, increase cooperation with community college organizations, and encourage community colleges to join the organization. In addition, AACTE offers recommendations for state departments of education and accrediting bodies for teacher education to follow in order to improve collaboration.

Franco, R. W. *The Community College Conscience: Service-Learning and Training Tomorrow's Teachers.* ECS issue paper. Denver, Colo.: Education Commission of the States, 2000. (JC 010 333)

This issue paper of the ECS [http://www.ecs.org] addresses the ways community colleges can serve their communities through service-learning experiences with K–12 schools and through teacher education. Franco

argues that service learning and teacher training can help community colleges find their "conscience," a concept often overlooked. According to the author, because community colleges share the values of extending educational opportunities to diverse people and emphasizing civic participation, teacher training is a natural part of their conscience and should be emphasized. The author offers an interesting perspective on improving teacher education at community colleges, although specific examples or models are lacking.

Franco suggests that service-learning experiences for community college students in K–12 settings are an effective way to increase citizenship and create democratic schools and that community colleges provide a good environment for incorporating service learning with teacher preparation. Four reasons are provided for integrating service learning into teacher training in community colleges: the minority communities served by the colleges are in great need of teachers and are a crucial place to provide resources for younger students, service-learning experiences enable the older students in community colleges to share their experiences regarding careers, first- and second-year college students can receive valuable experience in K–12 settings that is often not available for peers in four-year institutions, and community colleges already have a faculty in place that emphasizes teaching and is interested in finding new ways to enhance student learning.

Bragg, S. *Investing in Tomorrow's Teachers: The Integral Role of Two-Year Colleges in the Science and Mathematics Preparation of Prospective Teachers: A Report from a National Science Foundation Workshop.* Arlington, Va.: National Science Foundation, Division of Undergraduate Education, 1998. (ED 427 968)

This report presents the findings from a workshop held by the NSF [http://www.nsf.gov] in 1998 on the role of community colleges in recruiting and preparing K–12 teachers in math and science. The workshop highlighted exemplary teacher education programs and partnerships, which are profiled in this report, at eleven community colleges. These programs and partnerships were selected from a national pool of nominations and include elements such as recruitment of prospective teachers, preteaching experiences, science and math courses with effective content and pedagogy, and relationships with local four-year institutions and school districts.

Workshop participants included staff and faculty from two-year institutions and four-year institutions; representatives of school systems, professional societies, and governmental agencies; and current teachers and preservice teachers. The participants developed a set of recommendations in several areas: recruitment of prospective teachers; strengthening of undergraduate science and math courses; preservice teaching experiences; inservice teaching activities; liaisons between two- and four-year institutions; and connections with business groups, professional societies, and other organizations. Recommendations are directed at two-year college faculty and

administrators, as well four-year institutions, governmental agencies, professional societies, and business and industry groups. The broad focus on involving various constituencies to improve the role of community colleges in preparing teachers was a key element of the NSF workshop and is a key strength of this report, which has been frequently cited since its publication.

Experiences of Students

Research on student experiences in community college teacher education programs and partnerships is a crucial but still rare component in developing and expanding effective programs. The publications described in this section report findings on student experiences from two programs.

McDonough, M. L. *A Case Study of the Transfer Process of a Selected Group of Students from a Community College to a Four-Year Teacher Education Program.* Dissertation, University of Maryland, College Park, 2000. (ED 454 924)

This dissertation presents a case study of students who began preservice teacher preparation at a community college and then transferred to a four-year university to continue in teacher education. The study investigated the role of the community college in preparing teachers by exploring the experiences of students in Maryland who transferred from the Community College of Baltimore County to Towson University. Interviews were conducted with fourteen transfer students and six faculty and administrators (from both institutions). The primary research question was, "To what extent is the transfer process seamless for teacher education students between a selected community college and university?" Related subquestions focused on perceptions of teacher preparation at the community college, impacts of the approach to teacher preparation at the community college on transfer students, and ways in which the institutions help or hinder transfer teacher education students.

Analysis of the interviews revealed five themes: "transfer tension, the ambiguous role of the community college in teacher preparation, the role of the student in the management of his/her transfer, the erection and maintenance of institutional barriers, and feelings of alienation, especially for non-traditional students." According to the author all of the students in the study experienced some problems during transfer. Some students fared better than others, but everyone had to contend with an articulation system that did not include specific arrangements for teacher education. Students had to figure out which courses were appropriate for transfer to the university and contend with the possibility of courses not being accepted for transfer. Due in part to the lack of specific processes for students to transfer into teacher preparation programs, there was some ambiguity about the community college's role in educating teachers.

Many of the problems reported by the respondents in this study related to organizational issues, including program planning and articulation agreements. The author recommended primarily organizational modifications to help the institutions collaborate more effectively to align courses, clarify articulation, and discuss the specific roles each institution should have in teacher preparation. Though, as a case study, this research was limited in scope, it provides an insightful focus on the stories of students and of the faculty and staff who worked with them as they went through the transfer process into teacher education.

Wilson, E. V. *Critical Success Factors: PVCC Teacher Education Transfers to the University of Virginia.* Charlottesville, Va.: Piedmont Virginia Community College, Office of Institutional Research and Planning, 2001. (ED 459 877)

This report presents factors that influenced student success in a collaborative program between a community college and a university to attract nontraditional students into teacher education programs. The Teaching Fellows Partnership between Piedmont Virginia Community College (PVCC) and the Curry School of Education at the University of Virginia ran from 1997 to 2000, with ten students enrolled each year. Funded by a grant, the program provided stipends for PVCC students selected to participate, financial aid for students once admitted to the Curry School, and funds for the PVCC library to expand collections related to education. At the time this report was produced, the program had experienced mixed success, and the recruitment and retention of students had proved to be more challenging than anticipated. The authors incorporated observations of students and student feedback from several cohorts to better understand the factors related to retention in the program; it is this focus on student voices, though limited to a small number of students, that is the strength of this report. The authors found that three factors (mentoring, desire to teach, and internal motivation) were influential among students retained in the program, and three factors (confusion about requirements, feelings of isolation, and a desire to complete only an undergraduate degree at the university as opposed to the bachelor's and master's degrees required in the teacher education program) were influential among those who were not retained. These factors suggest that building a cohesive community and providing support for students are key to helping students successfully transfer into and complete a teacher education program.

Literature Reviews

The ERIC Clearinghouse for Community Colleges [http://www.gseis.ucla.edu/ERIC] has produced two recent articles that provide a synthesis of the literature on teacher education at community colleges.

Allen, R. "Teacher Education at the Community College: Partnership and Collaboration." ERIC Digest. Los Angeles: ERIC Clearinghouse for Community Colleges, May 2002. (JC 020 603)

This article provides a brief discussion of the ways community colleges are participating in teacher preparation and the reasons why community colleges are important for recruiting and preparing teachers. As an ERIC Digest, this is a short summary intended to be a quick read, and it succinctly synthesizes ideas from several references. The author notes that many states are exploring new ways to recruit and prepare teachers to meet teacher shortages and that community colleges, located in many urban and rural areas in great need of teachers and enrolling large percentages of minority students, are excellent potential sources for teachers. Baccalaureate and postbaccalaureate programs in teacher certification and 2+2 partnerships are discussed as two ways for community colleges to be involved in teacher preparation.

Gerdeman, R. D. "ERIC Review: The Role of Community Colleges in Training Tomorrow's School Teachers." *Community College Review,* Spring 2001, *28*(4), 62–76. (EJ 626 854)

This ERIC Review article discusses the need for K–12 teachers and presents community colleges as an important source for teacher recruitment and training. Like an ERIC Digest article, though with more depth, this article provides a useful synthesis of ideas from the literature. The author points out the need for teachers and mentions the specific problems related to teacher shortages in urban and rural areas, shortages of minority teachers, and large numbers of underprepared teachers. Community colleges are described as a valuable pool for teacher recruitment, especially because of their diverse student bodies and their students' level of interest in the teaching profession. The current role of community colleges in teacher preparation, through education coursework, teacher preparation programs, and agreements and partnerships with four-year institutions, is discussed, along with three exemplary programs. The article concludes by suggesting five goals to meet to make teacher preparation more integral to the function of community colleges.

Journal Articles

The journal articles listed here are additional suggested readings on teacher preparation at community colleges.

Anglin, L. W., Mooradian, P., and Hamilton, A. "A Missing Rung of the Teacher Education Ladder: Community Colleges." *Action in Teacher Education,* 1993, *15*(1), 8–13.

Boggs, G. R., and Bragg, S. "Teaching the Teachers: Meeting the National Teacher Preparation Challenge." *Leadership Abstracts,* 1999, *12*(1). Available on-line [http://www.league.org/publication/abstracts/leaderab_main.htm]. (Also available in ERIC document ED 447 855.)

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Frieman, B., Bartwo, M., and Cox, C. "Improving Articulation Between Two- and Four-Year Colleges." *Community College Journal,* Aug.–Sept. 2000, pp. 28–31.

Gelfer, J., Filler, J., and Perkins, P. "The Development of a Bachelor's Degree in Early Childhood Education: Preparation for Teaching Inclusive Education." *Early Child Development and Care,* 1999, *154,* 41–48.

Haver, W. E., and Watson, R. F. "A Not So New Challenge for Community Colleges: Teacher Education." *Community College Journal,* Oct.–Nov. 1997, pp. 32–34.

Loucks-Horsley, S., and others. "The Role of Community Colleges in the Professional Development of Science Teachers." *Journal of College Science Teaching,* 1996, 26(2), 130–134.

Wood, S. S. "The Critical Role of Two-Year Colleges in the Preparation of Teachers of Mathematics: Some Strategies That Work." *Community College Journal of Research and Practice,* 2001, 25, 361–368.

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Jorge R. Sanchez, Frankie Santos Laanan
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Dennis McGrath
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John Stewart Levin
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Jan M. Ignash
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Connie L. Dillon, Rosa Cintron
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FROM THE EDITORS

A community college role in teacher education is not new. But there is a new—or, more accurately, renewed—interest in this role. A national conversation about how community colleges can help us alleviate the teacher shortage has truly begun, with many believing that an expanded community college role is critical to meet the nation's need for well-prepared teachers. This volume illustrates the extent to which community colleges have become major players in teacher education, not only in the traditional way of providing the first two years of an undergraduate degree in teacher education but in such more controversial ways as offering associate and baccalaureate degrees in teacher education and providing alternative certification programs.

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